CRC RECOMMENDATION IN RELATION TO RUSADA

A. Introduction

1. In September 2018, WADA’s Executive Committee (ExCo) reinstated the Russian Anti-Doping Agency (RUSADA) to the list of Code-compliant Signatories, on condition that RUSADA and the Russian Ministry of Sport would procure that WADA received: (i) an authentic copy of specified analytical data held at the Moscow Anti-Doping Centre (the Moscow laboratory) by 31 December 2018 (the Data Requirement); and (ii) related urine samples from storage in the Moscow laboratory by 30 June 2019. The intent was to give Russia the chance to demonstrate its commitment to the fight against doping by turning over information that would address the allegations by Dr Grigory Rodchenkov (former director of the Moscow laboratory) of a systematic doping conspiracy in Russian sport, and enable cheating athletes to be punished, and innocent athletes to be cleared of suspicion. In this way, a line could finally be drawn under a scandal that first arose in December 2014, and a new chapter in the fight against doping in sport could begin.

2. WADA Intelligence & Investigations Department (WADA I&I) was given a copy of the data in January 2019 (the Moscow Data, including the 2019 LIMS database and underlying data) and 2,262 samples in April 2019. The Moscow Data confirm what was contained in a copy of the Laboratory Information Management System (LIMS) database that a whistleblower had provided to WADA (the 2015 LIMS database), namely that in the period 2012-2015 hundreds of samples collected from Russian athletes returned presumptive findings for positive substances, but instead of pursuing those findings as required, the Moscow laboratory hid them and told WADA that the samples were negative. To date, WADA I&I has referred more than 40 cases to the relevant International Federations to pursue based on the Moscow Data, and it expects to be able to refer many more in the coming months. In addition, the Athletics Integrity Unit (AIU) and the International Biathlon Union (IBU) are assessing further cases based on the Moscow Data. Furthermore, WADA I&I's targeted re-analysis of the Moscow samples (94 samples re-analysed to date) has already yielded 14 adverse analytical findings (i.e., a 15% hit rate).

3. However, as set out below (see Section B), having conducted an extensive investigation, and having given their Russian counterparts a full and fair opportunity to address their concerns, WADA I&I and the independent forensic digital experts that WADA I&I have retained from the University of Lausanne (the Independent Experts) have identified clear evidence that:

   3.1 The Moscow Data is neither complete nor fully authentic. In particular, while the 2019 LIMS database matches the 2015 LIMS database in many respects, hundreds of presumptive adverse analytical findings that appear in the 2015 LIMS database have been removed from the 2019 LIMS database, and the related underlying raw data and PDF files have been deleted or altered.

   3.2 Some of the presumptive positive findings and related evidence were removed in 2016 or 2017, after the general scheme to cover up the doping of Russian athletes was first revealed by Dr Rodchenkov and then quickly confirmed by Professor Richard McLaren's investigation. However, further significant deletions and/or alterations were made in December 2018 and January 2019 (i.e., after ExCo imposed the Data Requirement) before the Moscow Data were made available to a WADA team for copying. These activities were concealed by back-dating of computer systems and data files in an attempt to make it appear that the Moscow Data have been in their current state since 2015. Furthermore, the commands issued to
execute the manipulations, deletions and back-dating were also deleted, in an attempt to avoid detection of what had been done.

3.3 In addition, on or after 25 November 2018 (i.e., again, after the Data Requirement was imposed), but before 10 January 2019 (i.e., before the Moscow Data were made available to the WADA team), someone in the Moscow laboratory:

3.3.1 planted fabricated evidence into the LIMS database (purported messages between laboratory staff members) to support the argument now being advanced by the Russian authorities that it was Dr Rodchenkov and two co-conspirators\(^1\) who falsified entries in the Moscow LIMS database as part of a scheme to extort money from athletes; and

3.3.2 deleted from the LIMS database important evidence proving that another laboratory staff member (Mr Evgeny Kudryavtsev) was involved in the cover up of doping by Russian athletes in 2014 and 2015. Mr Kudryavtsev is currently an important witness for the Russian side in several cases, in which he denies there was any conspiracy to protect Russian athletes from exposure for doping, and calls Dr Rodchenkov a liar.

3.4 The deletions and alterations did not stop there. After the discrepancies in the Moscow Data were presented to the Russian authorities in September 2019, in their efforts to explain away those discrepancies the Russian authorities referred to other data sources that had not previously been made known to or handed over to WADA (the **New Data**). On 15 October 2019 WADA I&I requested a forensic copy of the New Data, which the Russian Minister for Sport, Mr Pavel Kolobkov, purported to provide on 23 October 2019. The Independent Experts analysed the New Data and determined that (among other things) highly relevant data had been deleted between 18 and 22 October 2019, before the forensic copies were made, other important data that should have been present were also missing, and the fabricated messages referenced above had been included. The Independent Experts concluded that the New Data were not trustworthy sources of information and contained forged data.

4. This is an extremely serious case of non-compliance with the requirement to provide an authentic copy of the Moscow Data, with several aggravating features (see Section C). The Compliance Review Committee (**CRC**) therefore strongly recommends that ExCo instructs WADA management to send a formal notice to RUSADA and the Russian Sports Ministry, asserting non-compliance with the Data Requirement, and proposing the consequences set out in **Section D**, as well as the reinstatement conditions at **Section E**.

5. It will then be for RUSADA either to accept the non-compliance alleged, and the consequences and reinstatement conditions proposed, or else to dispute them, in which case the matter will go to the Court of Arbitration for Sport (**CAS**), which will determine the alleged non-compliance, and (if applicable) fix the consequences of non-compliance and the reinstatement conditions, all in accordance with the relevant provisions of the International Standard for Code Compliance by Signatories (**ISCCS**).

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\(^1\) Moscow laboratory staff members Dr Timofey Sobolevsky (head of the Chromatography Mass-Spectrometry Department) and Mr Oleg Michalov (IT System Administrator).
B. KEY FACTS

B.1 Background - overview of the sample analysis process

6. WADA’s International Standard for Laboratories specifies that urine samples should first be subjected to an Initial Testing Procedure (ITP) to determine whether any prohibited substances appear to be present in the sample. If yes, a Presumptive Adverse Analytical Finding (Presumptive AAF) is recorded, and Confirmation Procedures (CP) are carried out. If they confirm that presence, then an Adverse Analytical Finding (AAF) is issued, and the athlete is charged with a Code Article 2.1 Anti-Doping Rule Violation (ADRV) (presence of prohibited substance in athlete’s sample).

7. When a sample is analysed for the presence of a prohibited substance, the instrument used (e.g., a gas chromatograph interfaced with a mass spectrometer) generates raw data containing the results of the analysis (Raw Data Files), and the raw data are converted by special software into PDF documents displaying the chromatograms revealing the presence (or otherwise) of the prohibited substance in question (PDF Files).

B.2 Whistleblower allegations of Russian doping and cover-up

8. In December 2014, German television broadcaster ARD aired a documentary that detailed allegations by Russian whistleblowers Yuliya Stepanova and Vitaly Stepanov that Russian track and field athletes were being systematically doped and their subsequent positive drug test results covered up. A WADA-mandated independent commission endorsed and expanded upon these allegations in November 2015, leading to the IAAF suspending the Russian Athletics Federation, and WADA suspending the accreditation of the Moscow laboratory and declaring RUSADA non-compliant.

9. In August 2015 Dr Sobolevsky and Mr Migachev resigned from their employment by the Moscow laboratory. On 10 November 2015, Dr Rodchenkov resigned his directorship of the Moscow laboratory. On 17 November 2015, he flew from Russia to the USA.

10. In May 2016, Dr Rodchenkov went public with a claim that the Russian Ministry of Sport sponsored a scheme from 2011 to 2015 to dope Russian athletes and to cover up that doping by not following up or reporting Presumptive AAFs from samples of protected Russian athletes (the Disappearing Positives Methodology, or DPM) and/or by swapping samples after they were collected but before they were analysed.

11. In the subsequent WADA-mandated independent investigation, Professor Richard McLaren investigated those allegations and the supporting evidence provided by Dr Rodchenkov, which included thousands of Excel sheets, emails, PDFs, and other documents from the Moscow laboratory. On 17 June 2016, Professor McLaren announced his preliminary finding that there was enough corroborated evidence to confirm the DPM allegations and the existence of a protection scheme for Russian athletes. He then confirmed that finding in an initial report dated 18 July 2016 and expanded on it in a final report dated 9 December 2016, alongside which he published Evidence Disclosure Packages (EDPs) containing evidence relating to the athletes (from both summer and winter sports) that Professor McLaren considered were involved in and or benefitted from the scheme. Professor McLaren explained in his final report (at p.12) that he had sought but was unable to obtain Moscow

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2 The key facts summarised in this section are derived mainly from the WADA I&I report dated 20 November 2019, a copy of which accompanies this recommendation.
laboratory server or sample data. On request, such computer records were unavailable to [him] and the samples in the storage area had been sealed off by the Investigative Committee of the Russian Federation'.

12. In October 2017, a whistleblower provided WADA I&I with a copy of the Moscow LIMS database for samples analysed between 1 January 2012 and 31 August 2015 (previously defined as the **2015 LIMS database**). The Russian authorities disputed the authenticity of the 2015 LIMS database and alleged that Dr Rodchenkov manipulated analytical results as part of his own private extortion scheme, not as part of a state-sponsored doping scheme. However, WADA I&I concluded through examination of external sources of information that the 2015 LIMS database was an authentic copy of the actual LIMS database in the Moscow laboratory. The AIU came to a similar conclusion after conducting its own investigation of the parts of the 2015 LIMS database (relating to track & field athletes) supplied to it by WADA I&I. Furthermore, in December 2017 the International Olympic Committee’s Schmid Commission concluded that the 2015 LIMS database was one of the pieces of 'independent and impartial evidence' that 'enables the confirmation of the existence of the Disappearing Positives Methodology as well as a tampering methodology, [...] as described in the Final Report by Prof. Richard McLaren'.

13. WADA I&I has identified 578 samples, collected from 298 athletes, that are most suspicious for doping (the **Target Group**). In addition, the AIU and the IBU have identified further highly suspicious cases beyond the Target Group. However, to pursue these cases further information is required, in particular from the Raw Data Files and/or the PDF Files underlying the Presumptive AAFs. Nevertheless the Russian authorities refused to provide access to those data when asked in 2017 and 2018, on the basis that the data were potentially evidence in a criminal investigation being conducted by the Investigative Committee of the Russian Federation (ICR) into Dr Rodchenkov’s activities, and therefore could not be shared with outside parties, as a matter of Russian criminal law.

**B.3 Reinstatement of RUSADA on condition that the Moscow Data are provided**

14. To break the impasse, and thereby to enable the punishment of any athletes who had tested positive, and to clear from suspicion any athletes who had not, on 20 September 2018 the ExCo reinstated RUSADA to the list of Code-compliant Signatories, on condition that RUSADA and the Ministry 'must procure' the provision to WADA by 31 December 2018 of an 'authentic' copy of the Moscow laboratory’s LIMS database covering the period 1 January 2012 to 31 August 2015, along with the data underlying the findings reported in the LIMS database for that period (previously defined as the **Moscow Data**), 'by providing access as soon as possible to the analytical equipment that generated the data to an independent expert agreeable to WADA and the Russian Investigative Committee, so that the expert can retrieve the data directly from the equipment/servers, under the supervision of the Russian Investigative Committee and under conditions that preserve the integrity of the evidence'. This condition was specified to be a 'Critical' requirement (as that term is defined in the ISCCS). The ExCo specified that if it was not met, the ExCo would consider proposals from the CRC to address such non-compliance, in accordance with the relevant provisions of the ISCCS.

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3 Samples were included in the Target Group if Presumptive AAFs were reported in respect of them in the 2015 LIMS database, and/or there are indications that the urinary steroid profile for the athlete in question has been manipulated, and/or the McLaren EDPs include an email saying that the athlete should be 'saved' (by burying a Presumptive AAF), and/or WADA holds the sample in question and so it is available for re-analysis.
15. Following detailed negotiation of protocols for access (which the Russian authorities explained were necessary in order to maintain the integrity of the Moscow Data as potential evidence in criminal proceedings), an independent expert and supporting WADA team went to Moscow on 17 December 2018 to access and copy the Moscow Data. However, the mission was aborted after the Russian authorities sought to impose unacceptable access conditions.

16. Following further discussions, the WADA team was allowed into the Moscow laboratory starting on 10 January 2019 to take a forensic copy of the Moscow Data directly from the instruments and the servers in the laboratory, under the close supervision and control of the ICR. From 10 to 17 January 2019, the WADA team made forensic copies of the data on (i) two hard-drives (‘primary’ disk and ‘secondary’ disk) from the LIMS server, (ii) six hard-disks from the main server in the instrument room (Server One), (iii) three hard disks purportedly removed by the ICR from Server One on 21 July 2016 (the ICR Disks), and (iv) the computers of 19 different analytical instruments in the Moscow laboratory. In total, the WADA team forensically copied and brought back over 23 terabytes of data.

17. On 22 January 2019, the ExCo accepted the CRC’s recommendation that no sanction be imposed for the late provision of the Moscow Data. However, ExCo was advised that (i) WADA I&I and the Independent Experts would now check the authenticity of the Moscow Data; and (ii) if it was determined that the Moscow Data have been tampered with, the CRC would come back to the ExCo without delay with a recommendation for action in accordance with the ISCCS.

B.4 Due process followed

18. On 15 May 2019, WADA I&I reported to the CRC that although there was a very high degree of consistency between the 2015 LIMS database and the 2019 LIMS database, the following discrepancies were identified:

18.1.1 245 samples with ITP and/or CP findings recorded against them in the 2015 LIMS database have no ITP or CP findings recorded against them in the 2019 LIMS database. This includes 127 samples from athletes in the Target Group.

18.1.2 328 samples appear with findings in both copies of the LIMS database, but the content varies between the two databases. There are 17 samples from athletes in the Target Group in this category. In particular, whereas the 2015 LIMS database reports the presence of prohibited substances and non-prohibited substances in each of the 17 Target Group samples, the 2019 LIMS database only reports the presence of non-prohibited substances in those 17 samples (or else reports the presence of a prohibited substance, but at a concentration below the reporting limit, or else with steroid profile data set to lower and non-suspicious values). Similar selective alterations were also observed for samples from athletes outside the Target Group.

4 Investigation showed that 11 samples were affected by both deletion and modification of their LIMS data, so that the total number of samples (from athletes in or outside of the Target Group) that show discrepancies between the 2015 and 2019 LIMS databases is 562.

5 Investigation showed that 4 samples from athletes in the Target Group were affected by both deletion and modification of their LIMS data, so that the total number of samples from athletes in the Target Group that show discrepancies between the 2015 and 2019 LIMS databases is 140.
19. On 26 June 2019, the CRC instructed WADA I&I to investigate these discrepancies with the help of the Independent Experts, focusing on any activities in the period after 20 September 2018 that could have caused these discrepancies. This date was selected because it was the date that ExCo imposed the Data Requirement, after which no one in Russia could claim to be in any doubt about the importance of preserving the integrity of the Moscow Data.

20. The WADA I&I investigation that followed included putting written questions to the Russian authorities on 31 July 2019 and meeting with them in person on 5 September 2019 to discuss their responses. On 6 September 2019, WADA I&I provided a report to the CRC (WADA September Report) that included a technical report from the Independent Experts (Technical Report 1). The CRC met on 9 September 2019 to consider those reports. Gunter Younger and Matthieu Holz from WADA I&I attended the meeting, along with the Independent Experts, to present their findings and to answer the CRC’s questions. They told the CRC that the forensic digital evidence indicated that the Moscow Data had been altered before a copy was provided to WADA on 17 January 2019. This included back-dating, disk formatting, deletions of database back-ups, secure-erasing of files, and selective removal of user action commands from command logs, as well as replacement of databases, deletion of records, removal of tables, and missing command logs. On this basis, an ‘authentic’ copy of the Moscow Data had not been provided.

21. In addition, in late June 2019 WADA I&I passed 110,000 files of Moscow Data relating to Russian track and field athletes to the AIU, which the AIU began to analyse using a team of internal and external experts. The AIU also identified that Presumptive AAFs reported in the 2015 LIMS database were missing from the 2019 LIMS database, and that associated Raw Data Files and PDF Files were often manipulated or absent.

22. In normal cases, ISCCS Article 9 gives a Signatory an initial three months and then if necessary a further three months to correct a non-conformity with a ‘Critical’ requirement before the matter is brought before the CRC. However, based on the findings reported at the 9 September 2019 meeting, WADA management took the view that urgent action was required in this case to maintain confidence in the integrity of sport, which justified departing from the normal procedure and instead pursuing the matter on the ‘fast-track’ basis set out in ISCCS Article 9.5. The CRC agreed with this approach, and so on 17 September 2019 WADA management started a formal non-compliance procedure, sending copies of the WADA September Report and Technical Report 1 to the Russian authorities for comment, together with 31 specific questions to answer.

23. On 8 October 2019, the Russian authorities provided various documents in response, as well as answers to 23 of the 31 questions. Subsequently, at WADA’s request, they provided answers to the remaining questions, as well as copies of certain further data referenced in their original responses (defined above as the New Data). In short, the Russian authorities said that the Moscow Data were authentic, but the LIMS was a malfunctioning, antiquated system contaminated with results ‘falsified’ by Dr Rodchenkov and Dr Sobolevsky as part of a secret extortion scheme. They cited messages contained in the LIMS database in support of that contention. As a result, they argued, LIMS data have no evidential value, and instead the only reliable evidence are the Raw Data Files that the ICR copied onto the three disks on 21 July 2016 (viz the ICR Disks). They blamed what WADA had taken to be data manipulation in December 2018 and January 2019 on human error and LIMS system malfunction.

24. WADA I&I and the Independent Experts discussed this response with the Russian authorities at a meeting in Switzerland on 14 November 2019. WADA I&I then provided a report to the CRC, explaining that the material and explanations provided by the Russian authorities had
not caused the Independent Experts to alter their original findings. Instead, the new material had itself included forged data.

25. Representatives of WADA I&I and the Independent Experts attended a meeting of the CRC in Geneva, Switzerland, on Sunday 17 November 2019, to enable a full discussion of all of the material and the conclusions reached by WADA I&I and the Independent Experts. Those conclusions are set out in the WADA I&I report dated 20 November 2019 that accompanies this recommendation.

B.5 Conclusion: the Moscow Data were altered and deleted before WADA was given a copy

26. The CRC wishes to pay tribute to the enormous expertise and professionalism shown by WADA I&I and the Independent Experts in carrying out a highly effective investigation under difficult conditions. When the evidence they have gathered is viewed in its totality, the inescapable conclusion is that, while some deletions and alterations of the Moscow Data took place as early as July 2016, multiple further deletions and alterations were made after ExCo imposed the Data Requirement on 20 September 2018. After that announcement but prior to making the Moscow Data available to WADA, efforts were undertaken in the Moscow laboratory (particularly between 25 November 2018 and 16 January 2019): (i) to sanitise the Moscow Data of key analytical data and remove the ability to recover crucial evidence; and (ii) to plant fabricated evidence falsely incriminating Dr Rodchenkov and Dr Sobolevsky in criminal conduct. The perpetrators then went to significant lengths to cover their tracks. As a result, this outrageous conduct would have gone undiscovered but for the detailed digital forensic analysis conducted by the Independent Experts.

B.5.1 Alterations and deletions of Moscow Data prior to September 2018

27. After the publication in 2016 (in and alongside Professor McLaren’s two reports) of details of Presumptive AAFs that were falsely reported negative in ADAMS, a person or persons in Russia altered or deleted analytical data in the Moscow laboratory evidencing many of those Presumptive AAFs. While the analysis is continuing, already to date the following has been established:

27.1 Based on deletion time-stamps recorded in the LIMS system, on 29 June 2016 (i.e., six weeks after Dr Rodchenkov first publicly explained the Disappearing Positives Methodology, and two weeks after Professor McLaren had announced his preliminary conclusion that there was sufficient evidence in the emails, Excel sheets and other documents provided by Dr Rodchenkov to confirm those allegations), someone deleted from the ‘primary’ disk of the LIMS server more than 1,250 LIMS back-up copies that had been created in 2014 or 2015. No further details about the circumstances of this deletion are presently known. However, as discussed in detail below, on 17 December 2018 the IT system administrator for the Moscow laboratory (the System Administrator) executed a command (Zeroing Command)

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6 Back-up copies of the LIMS database are valuable as they provide a reference point of comparison to identify altered or missing data from the Moscow Data. Back-up copies are made in most operating systems as a matter of routine. The absence of back-up copies that would reasonably be expected to be present in the Moscow Data therefore requires explanation.

7 Mr Evgeny Mochalov, the husband of the current director of the Moscow anti-doping laboratory, Mrs Elena Mochalova.
on this ‘primary’ disk to overwrite the ‘free space’ of this disk with zeroes, the effect of which is to render unrecoverable previous commands, activities and any deleted data contained in that free space (e.g., the 1,250 back-up files). Moreover, the System Administrator then executed a command to delete the record of how many zeros were written and how long the command was operated.

27.2 On 21 July 2016, the ICR came to the Moscow laboratory and took away three hard-drives (viz the ICR Disks) from the file server in the instrument room, containing Raw Data Files and PDF Files.

27.3 Between 21 July 2016 and 25 July 2016, someone deleted a vast number of files from 12 instrument computers in the Moscow laboratory and from the ‘primary’ disk of the LIMS server, including folders of Raw Data files on the primary disk labelled ‘sochi’, ‘data’, ’2012’, ’2013’, ’2014’, and ’2015’. These deletions were selective; other folders (e.g., ’2016’) were not deleted.

27.4 On 25 July 2016, someone modified four PDF Files (changing their time-stamps) and subsequently deleted them.

28. These activities have already had an impact on efforts to pursue Russian athletes for ADRVs. For example:

28.1 The 2015 LIMS database includes details of (i) a urine sample provided by a Russian male biathlete that returned a Presumptive AAF and then a confirmed AAF for a long term metabolite of oxandrolone, a prohibited anabolic steroid; and (ii) a urine sample provided by a Russian female biathlete that returned Presumptive AAFs and then confirmed AAFs for ostarine (a prohibited SARM) and an ostarine metabolite.

28.2 The 2019 LIMS database lists both samples but contains no mention of Presumptive AAFs or confirmed AAFs for either of them.

28.3 Both databases record that PDF Files were generated to report the results of analysis of the two samples for the various substances on the Prohibited List, including anabolic steroids and SARMs. The PDF Files showing the results of analysis of the two samples for other substances are contained in the Moscow Data, but the PDF Files reporting the results of analysis of the samples for anabolic steroids and SARMs are missing. In addition, on 21 July 2016 an unidentified user using the name ‘Quantum’ deleted from the relevant instrument computer folders containing the Raw Data Files evidencing the confirmation of the presence of oxandrolone and ostarine (respectively) in those samples.

28.4 The Independent Experts were able to recover the Raw Data File evidencing confirmation of the oxandrolone metabolite. Moreover, using specialised software capable of recovering deleted files (by a process called carving), the Independent Experts were able to find the missing PDF Files reporting the Presumptive AAFs for the oxandrolone metabolite and for ostarine. Those two PDF Files contain traces of selective alteration in order to make the analytical results appear negative for the respective substances.

28.5 In short, therefore, the evidence indicates that the samples did indeed test positive for (respectively) oxandrolone metabolites and ostarine, that someone deleted the Presumptive AAFs from the 2019 LIMS database, that someone manipulated and
then deleted the PDF Files reporting the Presumptive AAFs for oxandrolone and ostarine respectively, and that on or before 21 July 2016 someone (‘Quantum’) deleted the Raw Data Files containing the CP results confirming those Presumptive AAFs.

28.6 On or about 27 August 2018, the IBU notified the Russian female biathlete that it was investigating her sample for a possible ADRV. On 25 September 2018, an unidentified user using the name ‘Quantum’ conducted a search in the 2019 LIMS database for the female biathlete’s sample.

29. Meanwhile the AIU has advised that:

29.1 There are many samples from track & field athletes listed in both the 2015 copy and the 2019 copy of the LIMS database as having Presumptive AAFs. In all cases reviewed to date, where this match exists, in addition the underlying Raw Data and PDF Files confirm the Presumptive AAF.

29.2 However, there are at least 89 samples that are listed in the 2015 LIMS database with Presumptive AAFs but appear in the 2019 LIMS database with no mention of any Presumptive AAFs, the 2019 version instead suggesting that those 89 samples all tested negative for any prohibited substances.

29.3 The materials contained in the McLaren EDPs (Excel sheets, emails, wash-out schedules, etc.) contain references to 84 of these 89 samples. Those references in the EDPs indicate there should be Presumptive AAFs in the LIMS database for those samples. In other words, the evidence in the EDPs is more consistent with the 2015 LIMS database than with the 2019 LIMS database.

29.4 The EDPs refer to approximately 140 samples in total from protected track & field athletes with indications of a relevant Presumptive AAF. Of those, 83 samples have Presumptive AAFs listed in the 2015 LIMS database but not in the 2019 LIMS database. In particular, of the approximately 60 track & field samples recorded in the EDPs as having a Presumptive AAF for an anabolic steroid, 52 have Presumptive AAFs in the 2015 LIMS database but not in the 2019 LIMS database.

29.5 Professor McLaren referred to athletes having a series of samples taken and tested to see how long it took for steroids to ‘wash out’ of their systems. The 2015 LIMS database includes records of series of samples from athletes containing Presumptive AAFs (at decreasing concentrations) for steroids. However, not all of those ‘wash out’ samples were referred to in the EDPs. In the case of a series of ‘wash out’ samples from 2012, only the 38 Presumptive Findings that were referred to in the EDPs are missing from the 2019 LIMS database; while the 17 Presumptive AAFs that were not referred to in the EDPs do appear in the 2019 LIMS database. This indicates that the sample codes in the EDPs might have been used as a reference point to delete Presumptive AAFs from the 2019 LIMS database.

29.6 A total of 154 relevant PDF Files and 5 Raw Data Files are missing from the Moscow Data passed to the AIU. The absence of these files appears to be selective, in that

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8 For one of the 84 samples, the EDP does not indicate a Presumptive AAF for EPO, but says EPO analysis has been ordered but is not yet ready. The 2015 LIMS database records a Presumptive AAF for EPO for that sample.
only PDF Files and Raw Data Files for analyses that led to Presumptive AAFs are missing, while the files for other analyses of the same samples that produced negative results are generally present. Fifty-four of the PDF Files relate to samples that have Presumptive AAFs in the 2015 LIMS database but not in the 2019 LIMS database, including 42 Presumptive AAFs listed for steroids.

29.7 Several PDF Files appear to have been manipulated by copying a blank chromatogram from another sample over the original chromatogram, very often in relation to a Presumptive AAF listed in the 2015 LIMS database that is absent from the 2019 LIMS database.

30. The analysis is continuing, and it can take several weeks to complete a comprehensive review of the position in relation to each sample in the LIMS database. However, a clear pattern has already emerged from the cases that have been reviewed to date: at some unknown point (but presumably after Dr Rodchenkov made the Disappearing Positives Methodology public), a person or persons unknown in Russia with access to the Moscow laboratory accessed the LIMS system and sought to alter or delete the evidence of various positive findings (Presumptive AAFs listed in the LIMS, and the associated Raw Data Files and PDF Files) made in respect of samples of specific athletes/athletes from specific sports.

B.5.2 Fabrication and deletion of Forum Messages at some point between 25 November 2018 and 10 January 2019

31. A ‘message exchange’ platform existed in the Moscow laboratory that allowed text communication (Forum Messages) between laboratory staff. The Forum Messages were time-stamped and stored within the LIMS database. There are thousands of them in both the 2015 copy and the 2019 copy of the LIMS database.

32. In a letter to WADA President Sir Craig Reedie dated 26 August 2019, Minister Kolobkov asserted that the Russian authorities had discovered ‘correspondence’ (i.e., Forum Messages) between Dr Rodchenkov and Dr Sobolevsky that included the topics of ‘money transfer’ and ‘bonuses’ in the context of ‘dirty samples’. Minister Kolobkov claimed that the communications showed Dr Rodchenkov and Dr Sobolevsky had extorted money from athletes and coaches under the threat of manipulating sample analysis results.

33. However, based on forensic digital analysis, the Independent Experts have established that:

33.1 The Forum Messages relied upon in Minister Kolobkov’s letter do not appear in the 2015 LIMS database, but instead were fabricated and inserted into the 2019 LIMS database at some point between 25 November 2018 and 10 January 2019 (i.e., prior to allowing WADA to copy the database).

33.2 Three further messages that do appear in the 2015 LIMS database, but were entirely innocuous in their original content, were modified in the same time-frame (i.e., 25 November 2018 and 10 January 2019) to falsely incriminate Dr Rodchenkov and Dr Sobolevsky.9

9 These messages in the 2019 LIMS database include the following (from Rodchenkov to Sobolevsky on 7 June 2013): ‘we are definitely not going to put 2780034, 2780424 and 2780489 out there!! They are far from being just some homeless people ... Treat all the files using the scheme, and you can take your Bonus home’; and (from Sobolevsky to Rodchenkov on 2 July 2013): ‘I propose we enlighten Kudryavtsev about our scheme involving the samples. We need to tell him straight and clearly, that we are creating the appearance of dirty
In a booklet and short film produced by the Russian authorities and delivered to WADA I&I on 14 November 2019, these fabricated messages have been used as the main basis for explaining the discrepancies and/or challenging the reliability of LIMS data.

In addition, 25 messages that are present in the 2015 LIMS database were deleted from the 2019 LIMS database, again between 25 November 2018 and 10 January 2019. These deleted messages are highly material because they show that in 2013 and 2014 the then head of Sample Reception and Aliquoting Department at the Moscow laboratory, Mr Evgeny Kudryavtsev, was involved in manipulation of chain of custody records, including in relation to 'pre-departure samples' (i.e., samples that were tested to ensure Russian athletes going to compete abroad would not test positive) and in relation to 'substituted samples' (a reference to destroying evidence in advance of an anticipated site visit by WADA in December 2014). Mr Kudryavtsev is currently a witness in several CAS cases, in which he denies Dr Rodchenkov’s allegation that there was a scheme to prevent the detection of doping by Russian athletes, and insists that Dr Rodchenkov is lying when he claims to the contrary. Therefore persons seeking to discredit Dr Rodchenkov, and to bolster denials of a protection scheme, would have every reason to remove these 25 messages from the 2019 LIMS database before allowing WADA to take a copy of it.

While the Independent Experts cannot narrow down the date of these fabrications and deletions further within the period 25 November 2018 to 10 January 2019, they did observe that between 5 and 10 January 2019 (most likely on 9 January 2019) a copy of the Forum Message table (‘forum_t’) containing the fabricated and modified messages (but not containing the 25 Kudryavtsev messages) was restored onto the LIMS database.

In its report, WADA I&I expresses the view that ‘[t]he fabricated, modified and deleted Forum Messages are a stunning deception. They are the figurative "smoking gun". Moreover, their existence demonstrates intent and provides a lens through which the totality of manipulations within the Moscow Data should be observed. The modified and inserted messages evidence an intent to incriminate Dr Rodchenkov, Dr Sobolevsky and Mr Migachev. While the deleted messages evidence an intent to hide incriminating evidence and protect Mr Kudryavtsev, a key witness against Dr Rodchenkov and his claims of state sanctioned subversion of the doping control process in Russia. The great effort required to establish this deception is evidenced by the fact that amongst the 11,227 Forum Messages stored within the Moscow LIMS, those responsible were able to identify and delete 25 highly inculpatory messages’.

The CRC agrees with WADA I&I’s assessment. In short, once the ExCo imposed the requirement to hand over the Moscow Data as a condition subsequent to the reinstatement of RUSADA, someone in Russia realised that upon review of the Moscow Data WADA would discover that Presumptive AAFs reported in the 2015 LIMS database were missing (amongst the 11,227 Forum Messages stored within the Moscow LIMS, those responsible were able to identify and delete 25 highly inculpatory messages).
with the related Raw Data Files and PDF Files). They therefore planted fabricated evidence into the 2019 LiMS database that would allow them to blame those discrepancies on Dr Rodchenkov, Dr Sobolevsky, and Mr Migachev. Such bad faith is indeed ‘stunning’, and the CRC agrees that it ‘provides a lens through which’ the explanations offered by the Russian authorities for the following subsequent events should be observed.

B.5.3 Alterations and deletions in December 2018 and January 2019

36. The Moscow Data were altered in December 2018 and January 2019, in the days and hours before WADA was permitted to take a copy. The alterations included deletion of files and back-ups, secure-erasing of files, replacement of databases, removal of tables, and deletion of logs, records, and commands. The explanation provided by the Russian authorities -- that these events are a consequence of the System Administrator dealing with a crisis of malfunction in the LiMS and his resultant corrective measures – is rejected by the Independent Experts based on the following analysis.

i. Alterations and deletions in December 2018

37. On 17 December 2018 (the day that the first WADA team landed in Moscow, and the day before they entered the Moscow laboratory to extract the Moscow Data):

37.1 The System Administrator back-dated the LiMS system to 12 November 2015 (i.e., just after Dr Rodchenkov resigned as director of the Moscow laboratory). While the system was back-dated, someone edited database files and deleted files under the directories of the databases labelled ‘2012’, ‘2013’, ‘2014’, ‘2015’ and ‘forum_t’. The System Administrator then deleted from the ‘primary’ disk of the LiMS server over 450 LiMS database back-up files created in 2016.

37.2 The Russian authorities claim that the System Administrator deleted these 450+ back-up files to free up space on the ‘primary’ disk, and that he copied them to his work computer before he did so. However, at the time the System Administrator deleted the files, the ‘primary’ disk already had approximately 93% of ‘free space’ available, and when (at WADA I&I’s request) the Russian authorities subsequently produced a forensic copy of the System Administrator’s work computer, it did not contain any trace of the deleted back-up files.

37.3 After deleting the 450+ database back-up files from the ‘primary’ disk of the LiMS server, the System Administrator issued a Zeroing Command - which operated for anywhere up to two hours and 50 minutes - to overwrite areas of the ‘free space’ on that disk with zeros, rendering any previously deleted data once stored in those areas (including the 450+ deleted database back-up files) unrecoverable. As already noted at paragraph 27.1, the System Administrator then issued a command that irretrievably deleted information as to the precise number of zeroes written on the ‘primary’ disk and the exact length of time the Zeroing Command operated.

37.4 The Russian authorities claim that the overwriting of zeros on the ‘primary’ disk was simply a consequence of the System Administrator performing ‘a record speed check’ to assess the speed at which data are written onto the disk. However, this does not explain why the System Administrator used the Zeroing Command, which ensured that previously deleted data existing in the ‘free space’ of that disk can never be recovered. Similarly, the Russian authorities’ claim that the System Administrator deleted the Zeroing Command from the command history log to avoid
inadvertent repetition of the command does not explain why he ran the Zeroing Command in the first place.

37.5 Log entries dated 12 November 2015 on the LIMS system were subsequently selectively deleted from a back-up log file.

37.6 The intent was to hide the fact that these changes occurred not on 12 November 2015 but rather in December 2018. It almost worked; advanced digital forensic analysis was required to uncover the truth.

37.7 The System Administrator then re-set the LIMS system to the date of 17 December 2018, then executed another command to back-date the system, this time to 11 August 2015 (when Dr Rodchenkov was still director of the Moscow laboratory). Seconds later, i.e., while the system was back-dated, the System Administrator formatted the ‘secondary’ disk of the LIMS server. Formatting sets up the file system and cleans all reference to existing and already allocated files. Notably, at the time of formatting, this ‘secondary’ disk contained no data, only zeroes. The Russian authorities’ explanation that the back-dating was the consequence of a system error is rejected by the Independent Experts, who have identified a specific command that was issued to back-date the system to 11 August 2015. How the disk came to contain no data, only zeroes, remains unexplained, because evidence exists within the system that ‘a’ secondary disk was mounted on the system in January 2016, in April 2017, and on 15 December 2018. If the secondary disk ultimately copied by the WADA team in January 2019 was the one mounted on the system on these dates, then it is reasonable to expect it to have contained valuable data before being overwritten by the zeroes. The claim by Russian authorities that the secondary disk ultimately copied by WADA in January 2019 was only attached on the system by the System Administrator on 17 December 2018, to improve the ‘reliability of the storage information’, is belied by the fact that that ‘secondary’ disk was not mounted to the system and therefore was incapable of storing any data, let alone improving the reliability of such storage.

37.8 As a result of the above activities, database back-up files generated between August 2016 and 17 December 2018 by the automated back-up script do not exist on either the primary disk or the secondary disk from the LIMS system imaged by WADA.

37.9 Finally, still on 17 December 2018, the System Administrator removed from the history files the commands for altering and back-dating the LIMS database and Server One, with the effect that the Independent Experts only discovered by advanced digital forensic analysis that the above activities occurred in December 2018 rather than in August 2015. The explanation offered by the Russian authorities – that the System Administrator did this to avoid inadvertent repetition of the commands – again does not explain why the commands were necessary in the first place.

ii. Alterations and deletions between 1 and 9 January 2019

38. Between 1 and 9 January 2019 (i.e., in the days and hours before the second WADA team arrived at the Moscow laboratory on 10 January 2019 to copy the Moscow Data):

38.1 Approximately 20,000 files were deleted, mostly from the instrument computers but also from the LIMS server. The explanation provided by the Russian authorities --
that this was just part of a routine process whereby 'unnecessary' files were deleted at the beginning of every year to create space on the hard disks -- is belied (i) by the fact that there are no digital traces of any mass file deletion at the beginning of prior years, only in January 2019; and (ii) by the fact that 15,743 (79%) of the files deleted in 1-9 January 2019 dated back to 2008-2017.

38.2 In addition, the Independent Experts recovered deleted scripts that included commands to export files, then re-import them while the system was back-dated, the effect of which was to back-date all the tables in the associated database to make it appear the data updates had occurred on earlier dates. The Russian authorities have offered no explanation for this.

38.3 The Russian authorities assert that the deletion of the c.20,000 files 'cannot damage the integrity of the data provided by the Moscow laboratory to the WADA experts', because the files did not contain any relevant information. However, the Independent Experts have determined that the deleted files include 11,720 'SLD' (sequence) files, 337 Raw Data files, and 531 PDF Files, of which 9,298 SLD files, all 503 PDF Files, and 1 Raw Data file were created between 1 January 2012 and 31 December 2015. Of the 503 PDF Files, 133 related to the analysis of anti-doping samples, of which 121 reported the results of ITP for anabolic steroids.\(^1\)

38.4 Files in the LIMS database dating back to 2012, 2013, 2014, and 2015 were deleted or altered on 6 January 2019.

38.5 On 8 January 2019, the System Administrator issued a command to back-date the LIMS system to 23 May 2015. While the system was back-dated, he replaced the LIMS database with a prior version of the database (a back-up file purportedly dated 21 December 2018), and deleted 623 database files from nine folders, including folders labelled 2012-2015. He also used a specialised software tool (which has to be downloaded from the Internet and installed on the machine) to back-date the time-stamps on the associated database files to 23 May 2015, and he used automated scripts to alter the LIMS database and to back-date multiple databases and associated files to various dates. According to WADA I&I, the effect was to give 'the erroneous and fraudulent impression' that the back-up version of the database that was restored onto the LIMS system on 8 January 2019 (which was the version made available to WADA for copying) had been on the LIMS system since 23 May 2015.

\(^1\) The Russian authorities assert that all of the Raw Data files were transferred from the computers on the analytical instruments to the three hard-drives that the ICR say they took from the Moscow laboratory on 21 July 2016 (previously defined as the ICR Disks). The Russian authorities claim that the ICR retained the ICR Disks untouched in sealed bags until making them available to WADA for copying on 11 January 2019. However, the Independent Experts have advised that 110 Raw Data Files and 120 PDF Files that were generated in the Moscow laboratory cannot be found on the ICR Disks. Furthermore, the fact that Raw Data Files or PDF Files that previously existed on instrument computers were only found in deleted state on the ICR Disks raises questions about the integrity and completeness of the data on those disks. Furthermore, 149 PDF Files recovered (by carving) from ICR Disk 2 were found to have been altered after the original file creation by copying chromatograms of a particular substance from a negative sample onto the PDF of the positive sample, and then changing the internal sample code from the copied material to match the internal code given to the positive sample. The Independent Experts advise that the changes appear selective, in that they have been observed only for one or a few specific substances in the PDF Files. In the time available, a complete analysis was not possible. However, the above analysis already demonstrates that the files on the ICR Disks are incomplete and at least partly inauthentic.
The System Administrator then deleted the scripts containing these back-dating and altering commands.¹¹

38.6 The Russian authorities’ explanation for this is that the System Administrator accidentally saved over the LIMS database on 22 December 2018, and so on 8 January 2019 he was simply restoring an authentic copy of the LIMS database from a back-up copy of the LIMS database that had been made on 21 December 2018 and saved on a disk stored in an ‘accounting’ safe, in order to ensure the WADA team got a full authentic copy of the LIMS database. They say the System Administrator then back-dated the system in an attempt to address an instability issue that he believed to be caused by a ‘time-stamp’ problem. These explanations are rejected by the Independent Experts. Based on the forensic evidence, the copy of the LIMS database provided to the WADA team is not a fully authentic copy of the LIMS database. It is noteworthy that although WADA I&I requested that a copy of the data saved on disks stored in the ‘accounting’ safe be provided as part of the New Data, the copy of the New Data provided by the Russian authorities did not include any back-up copy of the LIMS database from 21 December 2018, i.e., it did not include the back-up file that the System Administrator said he ‘restored’ to the LIMS server on 8 January 2019.

38.7 On 9 January 2019, the Forum Messages table containing fabricated and modified messages (but not the Kudryavtsev messages) was copied onto the 2019 LIMS database.¹²

38.8 Also on 9 January 2019, all tables from databases labelled 2008, 2009, 2010, and 2011 were removed from the LIMS server. The Russian authorities claim that the System Administrator deleted the entire LIMS database to arrest worsening instability within the LIMS system, and replaced it with the back-up file purportedly from 21 December 2018. They insist that this did not lead to deletion or alteration of any analytical data. However, WADA I&I has identified three examples (so far) of selective (and damning) manipulation of data between 6 and 9 January 2019: (1) the T:E ratio reported for a 2013 sample taken from a female track & field athlete was changed from more than 4:1 to only 2.3:1 (less than the threshold for further investigation); (2) a confirmed finding for furosemide in respect of a 2012 sample taken from a female skater was deleted (and the corresponding PDF File shows signs of manipulation of the chromatogram for furosemide); and (3) a confirmed finding of a T:E ratio of more than 7:1 in respect of a 2013 sample given by a female curler was deleted (and the corresponding PDF File shows signs of manipulation of the chromatograms, particularly for testosterone and epitestosterone). WADA I&I suggests that these examples ‘provide overwhelming evidence that the System Administrator’s actions did result in the destruction or modification of information on the results of doping samples tests stored on the LIMS server databases’. The CRC agrees.

¹¹ When reversing the back-dating command, the System Administrator mistakenly re-dated the system not to 8 January 2019 (2019-01-08) but instead to 1 August 2019 (2019-08-01), resulting in the system being dated in the future for a short period, until the system auto-corrected. This human error confirms that the alterations of the LIMS system were made intentionally by a person. The Russian authorities have confirmed it was the System Administrator.

¹² See paragraph 33, above.
On 10 January 2019, 101 SLD files and 137 PDF Files were deleted from the ‘primary’ LIMS disk.

iii. Deletions on 16 January 2019

While the WADA team was in the Moscow laboratory and in the middle of copying the Moscow Data, the Russian authorities advised them that removing the Server One hard drives might lead to an inability to re-start the server. The Russian authorities suggested instead to back up (transfer) the contents of Server One onto a new server. On 14 January 2019, WADA agreed to this back-up procedure, which was completed by the Russian authorities on 16 January 2019. However, the digital evidence has now revealed that on that day the System Administrator back-dated Server One to 19 August 2015, and then executed commands to format a ‘secondary’ disk on the server (so deleting all reference to existing and already allocated files on the disk) in a manner that made it appear the formatting had taken place on 19 August 2015; and a Zeroing Command was executed to overwrite data on the ‘primary’ disk with zeroes, rendering any data on that disk (including previously deleted data) irrecoverable. In addition, evidence exists that specialised software (found in free space on the LIMS system) was used to secure-erase files from Server One; and the System Administrator selectively removed from the command history files the commands to back-date the LIMS system, the Zeroing Command, the command to format the ‘secondary’ disk, and the commands to run a specialised tool to secure-erase files. In other words, the System Administrator did the same to the data on the Server One hard drives as he had already done to the LIMS hard drives. It is currently unknown what files he thereby erased and what data he overwrote.

It is important to note that at no point during the data copying process did the Russian authorities mention to the WADA team what the System Administrator had done on 17 December 2018 or between 1 and 16 January 2019. In fact, they did not mention it until October 2019, once they were confronted with the digital evidence of his activities.

iv. Manipulation and fabrication of the New Data produced on 23 October 2019

The tampering did not stop there. In their initial response on 8 October 2019 to the WADA September Report and Technical Report 1, the Russian authorities referred (for the first time) to various new data sources, including a ‘virtual test server’, the System Administrator’s computer, and seven optical disk images (previously defined as the New Data). In response, on 15 October 2019 WADA I&I asked for a forensic copy of the New Data, which Minister Kolobkov provided on 23 October 2019.

Upon examination, the Independent Experts determined (among other things) that the copy of the New Data provided by Minister Kolobkov was not authentic. Historical log files relevant for forensic analysis were deleted from the test server between 18 and 22 October 2019, databases labelled ‘2011’, ‘2012’, ‘2013’, ‘2014’, ‘crm_v2’ and ‘forum_t’ were deleted, and the database labelled ‘2015’ was reinstalled on 20 June 2019, while ‘log_do’ tables for the 2015-2019 databases were deleted on the same date. The Independent Experts also recovered copies of the fabricated Forum Messages from each of the two LIMS database back-up copies that had been dropped onto the test server and the System Administrator’s

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13 The Russian authorities do not dispute the use of this software on the system, but claim it is not possible to determine when it was used.
computer, respectively. The Independent Experts concluded that the New Data were not trustworthy sources of information and contained forged LIMS back-up files.

**B.6 Conclusion**

43. Having considered all of the relevant materials carefully, and having had the opportunity to question WADA I&I and the Independent Experts in detail, the CRC accepts and adopts WADA I&I’s conclusion that ‘the Moscow Data was intentionally altered prior to and during it being forensically copied by WADA. To this end, the Reinstatement Conditions are not fulfilled in that the Moscow Data is neither a complete nor authentic copy’.

44. Furthermore, the evidence indicates that while some of the incriminating parts of the Analytical Data were deleted as far back as July 2016, there was also deliberate tampering with the Moscow Data at some point between 25 November 2018 and 10 January 2019 (i.e. fabricated, modified and deleted Forum Messages), on 17 December 2018 (the day prior to the first scheduled visit of the WADA extraction team into the Moscow laboratory), and in the period 1-16 January 2019 (i.e., in the days and hours leading up to the second scheduled visit of the WADA extraction team to the Moscow laboratory, and during that visit). In addition, the New Data provided on 23 October 2019 was also manipulated prior to being provided to WADA, and included forged data.

45. During the copying of the Moscow Data in January 2019, the Russian authorities asserted to the WADA team that there had been numerous instances of remote access to the LIMS database, during which LIMS data could have been manipulated. They named Dr Rodchenkov, Dr Sobolevsky and/or Mr Migachev as possible suspects, and handed over hard copy evidence of identified remote access. WADA I&I therefore asked the Independent Experts to consider the possibility that the tampering they had detected was conducted remotely. The Independent Experts found no such evidence. While Dr Sobolevsky and Mr Migachev may have accessed the LIMS system remotely after they resigned from the Moscow laboratory in August 2015, the last evidence of any such access was on 9 June 2016, and the ICR has stated that any possibility of such remote access was ended when the current Moscow laboratory system administrator started work at the laboratory in July 2016.

46. WADA I&I has sought to determine whether any of the deletions or alterations have compromised the ability to pursue ADRVs against athletes in the Target Group. Because the WADA team took forensic images of the data from the servers and analytical instruments in the Moscow laboratory, in some cases the Independent Experts have managed to retrieve/restore the original data showing the presence of the prohibited substance(s) in the samples. Those cases have been passed or will be passed to the relevant international federation for prosecution, and the IBU is taking forward the two cases referred to at paragraph 28, above. However:

46.1 In most of the cases where a Presumptive AAF is listed in the 2015 LIMS database but not in the 2019 LIMS database for a sample in the Target Group, the Raw Data Files and/or PDF Files relating to that Presumptive AAF have been deleted and/or manipulated. In particular, there are 110 Raw Data Files and 120 PDF Files missing from the ICR Disks that are material to the investigation of athletes in the Target Group (although 15 of those Raw Data Files have been recovered by the Independent Experts from the respective instrument computers). In addition, attempts appear to have been made to manipulate some of the ITP Raw Data Files present in the Moscow Data. These deletions and alterations have materially
prejudiced the ability to pursue cases against 145 of the 298 athletes in the Target Group.

46.2 The AIU is continuing to review the parts of the Moscow Data relating to Russian track & field athletes. In particular, it is in the process of trying to retrieve/restore the data that is missing or has been altered in respect of samples provided by those athletes. The AIU does not yet know to what extent the deletions and alterations will impact its ability to bring cases against the athletes concerned.

46.3 What is already certain is that the alterations and deletions of the Moscow Data make it impossible to conclude definitively that any of the athletes included in the LIMS database do not have a case to answer for breach of the anti-doping rules, which is just as unwelcome an outcome for the clean athletes among them.

C. The CRC recommends that WADA send RUSADA a formal notice alleging non-compliance with the Data Requirement, in accordance with Code Article 23.5.4 and ISCCS Article 9.5.4.3

47. Based on the foregoing, there is clear evidence of serious non-compliance with a Critical requirement, in that the copy of the Moscow Data provided to WADA in January 2019 is neither complete nor authentic.

48. The CRC notes that RUSADA has stated that it was not in control of access to the Moscow Data, but instead depended on the Russian authorities (in particular, the Russian Ministry of Sport and the Russian Investigative Committee) to provide a complete and authentic copy of the Moscow Data to WADA. However, ExCo clearly and deliberately placed the requirement on RUSADA (and the Russian Ministry of Sport) to 'procure' that an authentic copy of the Moscow Data was provided to WADA, and neither RUSADA nor the Russian Ministry of Sport objected to that requirement or said that it could not be fulfilled. RUSADA may well have needed the assistance of the Government of the Russian Federation to fulfil the Data Requirement. It is often the case that a Signatory has to rely on others, including government agencies, to help it fulfil its Code obligations. However, just as athletes who rely on doctors or coaches to help them meet their anti-doping obligations remain fully liable for any non-compliance caused by the failings of the doctor or coach, so too the ISCCS is clear that a Signatory that relies on the support of government agencies to achieve Code compliance remains fully liable if those government agencies let it down. ISCCS Art 9.4.3 states: 'In no circumstances [...] shall it be an acceptable excuse, or a mitigating factor: (1)

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14 Code Article 23.5.4 states: 'In cases of non-conformity [...], WADA shall follow the corrective procedures set out in the ISCCS. If the Signatory fails to correct the non-conformity within the specified timeframe, then (following approval of such course by the WADA Executive Committee) WADA shall send a formal notice to the Signatory, asserting that the Signatory is non-compliant, specifying the consequences that WADA proposes should apply for such non-compliance, and specifying the conditions that WADA proposes the Signatory should have to satisfy in order to be reinstated to the list of Code-compliant Signatories'. ISCCS Art 9.5.4.3 states that ‘the CRC may recommend to WADA’s Executive Committee that the Signatory be sent a formal notice asserting that it is non-compliant with Critical requirements of the Code and/or the International Standards, identifying any Aggravating Factors asserted by WADA, specifying the Signatory Consequences that it is proposed to impose for such non-compliance (in accordance with Article 11) (including any such consequences that the CRC considers should be imposed urgently to protect the rights of clean athletes and/or to maintain confidence in the integrity of a sport and/or of a particular Event or Events), and specifying the conditions that it is proposed the Signatory should have to satisfy in order to be Reinstated (in accordance with Article 12)'.

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that the Signatory’s failure to comply with its obligations under the Code and/or the International Standards has been caused by interference by, and/or a failure to provide support or other act or omission by, any governmental or other public authorities. Each Signatory has voluntarily accepted the obligation to comply with its obligations under the Code and the International Standards, which includes an obligation under Code Article 23.3 to devote sufficient resources, and, where applicable, an obligation to secure the support of governmental and other public authorities required to achieve and maintain Code Compliance; [...]’.

49. The CRC therefore recommends that the ExCo instruct WADA management to send a formal notice to RUSADA in accordance with Code Art 23.5.4, alleging that there has been a material failure to comply with the Data Requirement, in that the copy of the Moscow Data that was provided to WADA in January 2019 was not complete and authentic, but instead had been altered and/or deleted in various material respects prior to copying. The notice should also assert that there are several aggravating factors present here, as detailed at paragraph 52.2, below.

D. The CRC recommends that the following consequences be proposed

50. ISCCS Article 11.1 sets out a list of consequences that may be imposed for non-compliance by a Signatory. ISCCS Article 11.2 sets out the principles to be applied to determine what consequences should be imposed in a particular case. In particular, it provides that:

50.1 The consequences imposed must ‘reflect the nature and seriousness of the non-compliance in that case, taking into account both the degree of fault of the Signatory and the potential impact of its non-compliance on clean sport. [...] Any alleged lack of intent or other fault is not a mitigating factor, but any fault or negligence on the part of a Signatory may impact on the Signatory Consequences imposed’.

50.2 The consequences imposed must go ‘as far as is necessary to achieve the objectives underlying the Code’, i.e., to punish non-compliance, to deter further non-compliance, and to motivate full compliance by all Signatories.

50.3 ‘Above all else, the Signatory Consequences imposed should be sufficient to maintain the confidence of all Athletes and other stakeholders, and of the public at large, in the commitment of WADA and its partners from the public authorities and from the sport movement to do what is necessary to defend the integrity of sport

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15 In addition, the comment to Article 9.4.3.2 states: ‘As CAS ruled in RPC v IPC, CAS 2016/A/4745, (a) a body with an obligation to enforce the Code within its sphere of authority remains fully liable for any violations even if they are due to the actions of other bodies that it relies on but that it does not control; [...]’.

16 The ISCCS defines ‘Aggravating Factors’ as follows: ‘[...] a deliberate attempt to circumvent or undermine the Code or the International Standards and/or to corrupt the anti-doping system, an attempt to cover up non-compliance, or any other form of bad faith on the part of the Signatory in question; a persistent refusal or failure by the Signatory to make any reasonable effort to correct Non-Conformities that are notified to it by WADA; repeat offending; and any other factor that aggravates the Signatory’s Failure to comply with the Code and/or International Standards’.

17 ISCCS Art 11.2.1.

18 ISCCS Art 11.2.4.
against the scourge of doping. This is the most important and fundamental objective, and overrides all others’. 19

51. Paragraph B.3 of ISCCS Annex B identifies the range of consequences that apply *prima facie* in cases involving non-compliance with Critical requirements. ‘The intention behind Annex B is to promote predictability and consistency in the imposition of *Signatory Consequences* across all cases. However, there shall be flexibility to vary within or even to depart from this range in a particular case, where the application of the principles set out above to the specific facts and circumstances of that case so warrant. In particular, the greater the degree of non-compliance (i.e., the more requirements with which the *Signatory* has failed to comply, and the more important those requirements are to clean sport), the greater the *Signatory Consequences* should be). If the case includes not only non-compliance with Critical requirements but also Aggravating Factors, that shall warrant a significant increase in the *Signatory Consequences* imposed (which may include, without limitation, a Fine). On the other hand, if it includes extenuating circumstances, that may warrant the imposition of lesser *Signatory Consequences*. 20

52. The non-compliance in this case could hardly be more serious:

52.1 ExCo deemed the requirement to provide an authentic copy of the Moscow Data to be ‘Critical’ because: (i) it would enable the anti-doping community finally to resolve and draw a line under the allegations of a systematic conspiracy to dope Russian athletes; (ii) it would ensure that any Russian athletes who had tested positive could be punished; and (iii) just as importantly it would ensure that innocent Russian athletes could be cleared of suspicion. The tampering with the Moscow Data has compromised those objectives. As noted above, hundreds of Presumptive AAFs made by the Moscow laboratory in 2012 to 2015 have been removed from the LIMS database and the underlying Raw Data and PDF Files have been deleted or altered, thereby compromising the ability to pursue cases against 145 of the 298 athletes in the Target Group. In short, the opportunity to come clean and move on has been well and truly spurned.

52.2 There are several aggravating factors present here, as defined in the ISCCS, which justify a significant increase in the consequences to be imposed beyond those set out in ISCCS paragraph B.3.1. In particular:

52.2.1 Having accepted without objection the requirement to provide WADA with an authentic copy of the Moscow Data as a condition of the reinstatement of RUSADA, the Russian authorities did not just fail to provide the data in complete and authentic form. Instead, while some of the Moscow Data was deleted as far back as July 2016, the evidence is clear that there was deliberate tampering with the Moscow Data between 25 November 2018 and 16 January 2019 (i.e., after ExCo imposed the Data Requirement).

52.2.2 This included the planting of fabricated evidence into the Forum Messages section of the 2019 LIMS database to enable the Russian authorities to blame Dr Rodchenkov for the fact that Presumed AAFs and the related

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19 ISCCS Art 11.2.5.
20 ISCCS Art 11.2.10.
supporting data are missing from the Moscow Data, as well as the deletion of evidence that would have bolstered Dr Rodchenkov’s credibility and undermined the credibility of a key witness against him. As noted above, this level of misconduct is ‘stunning’.

52.2.3 There were further significant deletions and/or alterations made to the Moscow Data in December 2018 and January 2019, just before (or even while) the WADA team was allowed to make a copy of those data.

52.2.4 These deletions and alterations were all then back-dated in an attempt to make it appear that the Moscow Data have been in their current state since 2015. Furthermore, the commands issued to execute the amendments and deletions and back-dating were themselves then also deleted in order to cover up these activities.

52.2.5 In addition, the New Data provided on 23 October 2019 were also tampered with prior to handover to WADA, and also included forged data.

52.3 The bad faith inherent in these actions is obvious. It shows a complete disregard for the values underlying the anti-doping movement, and for the efforts of WADA and its stakeholders to get to the root of the problem, so that everyone could draw a line under the matter and move on.

53. The CRC does not know who gave the instructions to alter and delete the Moscow Data and to plant fabricated messages in that data to falsely incriminate Dr Rodchenkov. However, the Moscow laboratory was at all relevant times under the authority and control of the Russian Ministry of Sport and/or the Russian Investigative Committee, each of which was well aware of the need to protect the integrity of the Moscow Data. In fact, the Russian Investigative Committee has maintained since at least 2016 that the Moscow laboratory is a ‘crime scene’ and that any material in the laboratory is potential evidence in the criminal investigation it is pursuing against Dr Rodchenkov. That was the excuse originally given in 2017 and 2018 for not providing WADA with a copy of the Moscow Data. On 15 October 2018, Minister Kolobkov referred to the Moscow Data as ‘sealed evidence’, access to which could only be granted by the Russian Investigative Committee, ‘in a controlled and regulated manner in compliance with the Russian Criminal Procedural Code’; and on 10 January 2019 Minister Kolobkov confirmed that the Russian authorities were willing to provide WADA with access to the instruments in the laboratory to retrieve the Analytical Data, ‘under the supervision of the Russian Investigative Committee and under conditions that preserve the integrity of the evidence ... [d]espite the specific legal requirements to keep evidence in the criminal case file until the completion of the criminal proceeding’. Therefore, the Russian authorities cannot credibly argue that they cannot be blamed for the deletions and alterations of parts of the Moscow Data in November and December 2018 and January 2019. They were responsible for preserving the integrity of the Moscow Data.

54. Accordingly, applying the principles set out in ISCCS Article 11.2 to the facts of this case, the CRC strongly recommends that WADA propose the following consequences, all (unless otherwise specified) to come into effect on the date on which the decision that RUSADA is non-compliant becomes final and to remain in effect until the fourth anniversary of that date (the Four Year Period):
54.1 Representatives of the Government of the Russian Federation (i.e., persons elected or appointed to Government office, as well as Government employees, and any other Government representatives, whether at a national or regional level):

54.1.1 may not be appointed to sit and may not sit as members of the boards or committees or any other bodies of any Signatory (or its members) or association of Signatories during the Four Year Period;\(^{21}\) and

54.1.2 may not participate in or attend any editions of the following events held during the Four Year Period: (a) the Youth Olympic Games (summer and winter); (b) the Olympic Games and Paralympic Games (summer and winter); (c) any other event organised by a Major Event Organisation; and (d) any World Championships organised or sanctioned by any Signatory.\(^{22}\)

54.2 Russia may not host in the Four Year Period, or bid for or be granted in the Four Year Period the right to host (whether during or after the Four Year Period), any editions of (a) the Youth Olympic Games (summer and winter); (b) the Olympic Games and Paralympic Games (summer and winter); (c) any other event organised by a Major Event Organisation; and/or (d) any World Championships organised or sanctioned by any Signatory.\(^{23}\) Where the right to host any such event in the Four Year Period has already been awarded to Russia, the Signatory in question must withdraw that right and re-assign the event to another country, unless it is legally or practically impossible to do so.\(^{24}\) In addition, Russia may not bid for the right to host the 2032 Olympic Games and Paralympic Games, irrespective of whether the bidding for that right takes place during or after the Four Year Period.

54.3 Russia’s flag may not be flown at any editions of the following events held during the Four Year Period: (a) the Youth Olympic Games (summer and winter); (b) the Olympic Games and Paralympic Games (summer and winter); (c) any other event organised by a Major Event Organisation; and (d) any World Championships organised or sanctioned by any Signatory.\(^{25}\)

54.4 Neither the President, the Secretary-General, the CEO, nor any member of the Executive Board/Governing Board of either the Russian Olympic Committee (\textbf{ROC}) or the Russian Paralympic Committee (\textbf{RPC}) may participate in or attend any editions of the following events held during the Four Year Period: (a) the Youth Olympic Games (summer and winter); (b) the Olympic Games and Paralympic Games (summer and winter); (c) any other event organised by a Major Event Organisation; and (d) any World Championships organised or sanctioned by any Signatory.\(^{26}\)

54.5 Russian athletes and their support personnel may only participate in or attend editions of the following events held during the Four Year Period -- (a) the Youth

\(^{21}\) See ISCCS Art 11.1.1.2 and Art B.3.1(c).

\(^{22}\) See ISCCS Art 11.1.1.10 and Art B.3.1(d)(2).

\(^{23}\) See ISCCS Art 11.1.1.5 and Art B.3.1(d)(1).

\(^{24}\) See ISCCS Art 11.1.1.5(a).

\(^{25}\) See ISCCS Art 11.1.1.10 and Art B.3.1(d)(2).

\(^{26}\) See ISCCS Art 11.1.1.10 and Art B.3.1(d)(2)).
Olympic Games (summer and winter); (b) the Olympic Games and Paralympic Games (summer and winter); (c) any other event organised by a Major Event Organisation; and (d) any World Championships organised or sanctioned by any Signatory—where they are able to demonstrate that they are not implicated in any way by the non-compliance, in accordance with strict conditions defined by WADA (or the CAS, if it sees fit), pursuant to the mechanism foreseen in ISCCS Article 11.2.6. The ExCo (or the CAS, if it sees fit) will specify the mechanism to be used by Signatories (which may include the involvement of representatives of appropriate Athlete Committees) to determine whether a particular athlete meets the conditions and so should be permitted to participate in the event(s) in question. WADA will monitor each affected Signatory's implementation of that mechanism, and its application and enforcement of the strict conditions, as part of WADA's overall compliance programme.

54.6 Given the aggravating factors that are present in this case, RUSADA shall pay a fine to WADA of 10% of its 2019 income or US$100,000 (whichever is lower).

55. The evidence (including from WADA's recent audits of RUSADA's operations) indicates that RUSADA's work is effective in contributing to the fight against doping in Russian sport, and that it is working productively in cooperation with other Anti-Doping Organisations, including in investigations within Russia. Therefore, the CRC does not recommend any special monitoring or supervision or takeover of RUSADA's anti-doping activities in the Four Year Period. Instead, provided that WADA management remains satisfied that RUSADA's

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27 The 2020 Youth Olympic Games are excluded from this consequence because they will start on 9 January 2020. Even if RUSADA were to accept the proposed consequences without dispute, there would not be sufficient time to set up and implement a mechanism to allow the participation of qualifying Russian athletes in accordance with ISCCS Art 11.2.6.

28 See ISCCS Art 11.1.1.10 and Art B.3.1(d)(2).

29 Such conditions shall include (without limitation) that the Russian athlete in question has to demonstrate: (1) that he/she is not mentioned in incriminating circumstances in the McLaren Evidence Documentation Packages or in the 2015 LIMS database; (2) that there are no indications of manipulation, alteration or deletion of relevant anti-doping data related to him or her in the 2015 LIMS database or the Moscow Data; and (3) that he/she has been subject to adequate in-competition and out-of-competition drug testing prior to the event in question (with WADA to determine what is adequate in each case).

30 ISCCS Art 11.2.6 states: 'The consequences should not go further than is necessary to achieve the objectives underlying the Code. In particular, where a consequence imposed is exclusion of Athletes and/or Athlete Support Personnel from participation in one or more Events, consideration should be given to whether it is feasible (logistically, practically, and otherwise) for other relevant Signatories to create and implement a mechanism that enables the non-compliant Signatory's Athletes and/or Athlete Support Personnel to demonstrate that they are not affected in any way by the Signatory's non-compliance. If so, and if it is clear that allowing them to compete in the Event(s) in a neutral capacity (i.e., not as representatives of any country) will not make the Signatory Consequences that have been imposed less effective, or be unfair to their competitors or undermine public confidence in the integrity of the Event(s) (e.g., because the Athletes have been subject to an adequate testing regime for a sufficient period) or in the commitment of WADA and its stakeholders to do what is necessary to defend the integrity of sport against the scourge of doping, then such a mechanism may be permitted, under the control of and/or subject to the approval of WADA (to ensure adequacy and consistency of treatment across different cases).'

31 See ISCCS Art 11.1.1.6 and Art B.3.1(g).

32 See ISCCS Art 11.1.1.3 and 11.1.1.4 (such measures not to be applied if and when 'WADA considers that the Signatory is in a position to implement such Anti-Doping Activities itself in a compliant manner' without such measures).
independence is being respected and there is no improper outside interference with its operations (see paragraph 58.2, below), RUSADA may continue to undertake all of its anti-doping activities during the Four Year Period, including education, testing, and results management, all in strict accordance with the requirements of the World Anti-Doping Code and supporting International Standards.

56. The senior ROC and RPC officials referred to in paragraph 54.4, above, might argue that they are blameless and therefore, like innocent Russian athletes, they should not be excluded from attendance at the Olympic Games, the Paralympic Games, or other major events. Similarly, international federations could say they are blameless and therefore should not be denied the right to stage their World Championships wherever they want, and the IOC and IPC and other major event organisations could say the same about their events. However:

56.1 The ISCCS empowers and mandates WADA and its stakeholders to use all means at their disposal to ensure that there are serious consequences for serious non-compliance. It emphasises that ‘the Signatory Consequences imposed should be sufficient to maintain the confidence of all Athletes and other stakeholders, and of the public at large, in the commitment of WADA and its partners from the public authorities and from the sport movement to do what is necessary to defend the integrity of sport against the scourge of doping. This is the most important and fundamental objective, and overrides all others’.\(^\text{33}\)

56.2 As a result it may be necessary to impose consequences that impact, at least in part, on persons who may not have had any part in the non-compliance at issue (because that is the only means that WADA and its stakeholders have at their disposal to send the appropriate message and provoke the sort of behavioural change that is required).\(^\text{34}\)

56.3 Thus the ISCCS does not provide that the NOC and NPC officials must be shown to have been implicated in the non-compliance before they can be excluded from attending major events. Nor does it provide the IOC and IPC and international federations must be shown to be implicated before they can be required not to stage their events in a non-compliant Signatory’s country.

56.4 Similarly, while ISCCS Article 11.2.6 creates an express safety-valve to enable Russian athletes to compete in major events if they can prove they are not implicated by the non-compliance at issue, it does not include any such mechanism for officials of the National Olympic Committee and National Paralympic Committee.

56.5 Reading such requirements into the ISCCS would negate most of the key consequences for non-compliance specified in the ISCCS, thereby frustrating its objectives.

\(^{33}\) ISCCS Article 11.2.5 (emphasis added).

\(^{34}\) See comment to ISCCS Art 11.2.5 (‘[T]o provide a meaningful sanction that will provoke behavioural change within the Signatory’s sphere of influence, and to maintain public confidence in the integrity of International Events, it may be necessary (and therefore legitimate and proportionate) to go so far as to exclude the Signatory’s affiliated Athletes and Athlete Support Personnel and/or its Representatives from participation in those International Events’).
56.6 WADA exists to protect clean athletes, and that is why the ISCCS gives clean Russian athletes an opportunity to compete at major events even though their National Anti-Doping Organisation is not compliant. However, this mandate does not extend to protecting the right of officials to participate in those events. Where the organisations that those officials represent are at least partly funded by the Russian Government, and are seen as an important symbol and focus of national pride at those events, allowing those officials to attend the events risks undermining the message that WADA and its stakeholders wish to send, namely that anyone who acts as Russia has done in this case thereby forfeits the right to participate in the top sports events for a lengthy period.

57. Issues relating to the accreditation of anti-doping laboratories fall outside the scope of the ISCCS. However, the CRC strongly recommends that (a) WADA consider not accrediting a new anti-doping laboratory in Russia during the Four Year Period; and (b) if and when accreditation of a new anti-doping laboratory in Russia is considered, it is made a condition of accreditation that no member of staff of the Moscow laboratory who is implicated in or considered to be responsible for the tampering with the Moscow Data has any involvement with the new laboratory.

E. The CRC recommends that the following reinstatement conditions be proposed

58. The CRC recommends that WADA propose in the formal notice to RUSADA that the following conditions must be satisfied in order for RUSADA to be reinstated at the end of the Four Year Period:

58.1 ISCCS Article 12.2.1.1 specifies that the first reinstatement condition should be that the non-compliance in issue is corrected in full. In this case, that does not appear to be possible, because some of the missing or altered Moscow Data appear to be irrecoverable. However, RUSADA must (with the support of the Russian authorities where necessary):

58.1.1 pay all of the costs incurred by WADA and any other Anti-Doping Organisations from January 2019 to date in investigating the authenticity of the Moscow Data;

58.1.2 under supervision of WADA I&I or the AIU (as applicable), conduct investigations into the impacted cases referenced at paragraph 45 above (and any other cases added by WADA I&I or the AIU to that list), including doing everything possible to locate the complete and authentic Moscow Data relating to those cases, so as to rectify in full the tampering that has impacted those cases;

58.1.3 provide any other support (including locating and providing any further data or information, and/or carrying out interviews or other investigative measures) as required by WADA or any other Anti-Doping Organisation to assist in determining whether Russian athletes whose samples are listed in the 2015 LIMS database have a case to answer for breach of the anti-doping rules. This includes, without limitation, providing authentic and complete hard and/or soft copies of the following documents relating to those samples: (a) doping control forms; (b) chain of custody forms; and (c) electropherograms and other records of the results of analysis of samples for EPO or related substances; and
58.1.4 where requested by WADA I&I, conduct results management in respect of ADRVs identified by the targeted re-analysis of the samples obtained by WADA I&I from the Moscow laboratory in April 2019, including the 14 adverse analytical findings generated to date from the re-analysis of 94 of those samples.

58.2 WADA must remain satisfied, throughout the Four Year Period, that RUSADA’s independence is being respected and there is no improper outside interference with any aspect of its anti-doping activities. To this end, an international observer must remain on RUSADA’s Supervisory Board, RUSADA’s Director General must provide quarterly reports to WADA confirming that RUSADA’s independence has been fully respected by the Russian authorities and no attempt has been made to interfere in any of its operations, and the CRC also strongly recommends that WADA require the appointment of one or more international experts to work with RUSADA management (at RUSADA’s cost), and that WADA conduct periodic audits (e.g., annually) of RUSADA’s anti-doping activities.

58.3 There must be no interference with the efforts of other Anti-Doping Organisations and their delegates (e.g., the ITA, IDTM, PWC, etc.) to test and/or investigate athletes in Russia.

58.4 All consequences imposed for RUSADA’s non-compliance must have been respected and observed in full by the Russian authorities throughout the Four Year Period.

58.5 WADA must have been paid in full all of the costs and expenses that it has reasonably incurred from the date on which the decision that RUSADA was non-compliant became final until the date of RUSADA’s reinstatement, including (without limitation) the costs and expenses reasonably incurred in implementing the above consequences (including the costs of supervising the mechanisms referenced in paragraph 54.5, above), and the costs of monitoring compliance with the consequences and with the reinstatement conditions.

59. If WADA I&I advises the CRC that the rectification sought in paragraph 58.1.2 has been achieved in full in every case, including (without limitation) in relation to the raw data mentioned in paragraph 45, the CRC will meet again to consider whether this recommendation should be changed or (if the recommendation has already been implemented) whether to recommend early reinstatement, i.e., before the end of the Four Year Period. On the other hand, if WADA I&I advises the CRC that further manipulated data/evidence have been provided, or if it appears that any of the other reinstatement conditions has been breached, the CRC will consider whether to recommend further consequences and/or an extension of the Four Year Period.

Jonathan Taylor QC
Chair, Compliance Review Committee
21 November 2019