



Arbitration CAS 2019/A/6161 Lyukman Adams v. International Association of Athletics Federations (IAAF), award of 6 April 2021

Panel: Mr Stephen Drymer (Canada), President; Mrs Carine Dupeyron (France); Mr Romano Subiotto QC (Belgium)

Athletics (triple jump)

Doping (dehydroepiandrosterone, desoxymethyltestosterone, nandrolone, trenbolone, oxandrolone, methenolone, ostarine)

Admissibility of the appeal in case the national association is not named as the respondent

Means of evidence

Influence of a doping plan or scheme on establishing ADRVs in individual cases

Email evidence

Assessment of circumstantial evidence

Distinction between liability and sanction with regard to the state of knowledge of the athlete

Doping plan or scheme as aggravating circumstance in the assessment of the period of ineligibility

Disqualification of results

1. According to Rule 42.18 of the 2016 IAAF Competition Rules, *“as a general rule, the respondent to a CAS appeal shall be the party which has taken the decision that is subject to appeal. Where the Member has delegated the conduct of a hearing (...) in accordance with Rule 38.5, the respondent to the CAS appeal against such decision shall be the member”*. The words *“as a general rule”* are indicative that this provision does not lay down conditions that are mandatory in every case and in all circumstances. In addition, the requirement that an appeal must be brought against *“the member”* is expressly limited to circumstances where that member *“has delegated the conduct of a hearing ... in accordance with Rule 38.5”*. However, where a national association ceases to be a member of the IAAF for any reason, it is impossible for it to conduct a hearing and therefore there is no proper *“delegation”* within the meaning of Rule 38.5. In such a case, there is no mandatory rule requiring to bring the appeal against the national association.
2. The IAAF Competition Rules do not specify that evidence must have been created or obtained specifically for the purpose of proving anti-doping rule violations (ADRVs). They state that the party with the burden of proving an ADRV – may resort to *“any reliable means”*. The use of the word *“any”* makes clear that there is no restriction on the type or nature of evidence that may be adduced. However, findings of fact can only be reached on the basis of evidence that is reliable.
3. The mere existence of a doping scheme does not suffice for the purposes of establishing ADRVs in individual cases. However, the existence of such a scheme is a relevant fact to be taken into account in the evaluation of the evidence.

4. The presence of a Domain Keys Identified Mail (DKIM) signature on an email makes it “*quite highly probable*” that the email in question was actually sent on the day and at the time indicated, and that the body of those emails has not been subsequently manipulated or modified (whether knowingly or unknowingly).
5. In a case where there are various non-analytical evidentiary elements, not only each element individually, but also the global weight of the evidence as a whole should be considered. It is in the nature of circumstantial evidence that single items of evidence may each be capable of an innocent explanation but, taken together, establish guilt to the ‘comfortable satisfaction’ mandated from a tribunal before it can inculcate a sportsperson of a disciplinary offence.
6. Liability under the IAAF Competition Rules is a rule of strict liability. An ADRV is established notwithstanding any intent, fault, negligence or knowledge on the part of the athlete. By contrast to the issue of liability, the state of knowledge of the athlete is relevant to the question of sanction.
7. In the circumstances, where it cannot be shown that an athlete was aware of the existence of a wider doping plan or scheme at the time the prohibited substances were used, the mere existence of such plan or scheme does not, of itself, amount to an aggravating circumstance in the assessment of the period of ineligibility. This flows from the language of the relevant rule which states that the aggravating circumstance exists when the athlete committed the ADRV “*as part*” of that scheme.
8. When applying the wide discretion it retains in the disqualification of results, a CAS panel must be guided by the principles of fairness and proportionality.

I. THE PARTIES

1. Mr. Lyukman Adams (“Appellant” or “Athlete”) is a Russian athlete specialising in triple jump. He has been a professional athlete since 2005. He has competed *inter alia* at the 2012 London Olympic Games in which he ranked ninth, at the 2012 IAAF World Indoor Championships in which he ranked third, at the 2014 IAAF World Indoor Championships in which he won the title and at the 2014 European Athletics Championships in which he ranked second. For the purposes of the IAAF Competition Rules (“IAAF Rules”), he is an International-Level Athlete.
2. The International Association of Athletics Federations, now known as World Athletics, (“Respondent” or “IAAF”) is the world governing body for athletics, recognised as such by the International Olympic Committee (“IOC”)¹. The IAAF is a signatory to the World Anti-Doping Code and is responsible for the running and enforcing of an anti-doping programme. The

¹ For ease of reference, the Panel will refer to the Respondent as “IAAF” throughout this Award. All references to the IAAF after November 2019 should be read as referring to World Athletics.

IAAF, which has its registered seat in Monaco, has the legal status of an association under the laws of Monaco.

II. FACTUAL BACKGROUND

3. This Award contains a concise summary of the relevant facts and allegations based on the parties' written submissions, correspondence and the evidence adduced. Additional facts and allegations found in the parties' written submissions, correspondence and evidence may be set out, where relevant, in connection with the legal discussion that follows. While the Panel has carefully considered all the facts, allegations, legal arguments, correspondence and evidence submitted by the parties, the Panel refers in this Award only to the matters it considers necessary to explain its reasoning and conclusions.
4. This case is an appeal against the first instance decision of the Sole Arbitrator in CAS 2018/O/5671 *IAAF v. Russian Athletics Federation (RUSAF) & Lyukman Adams* ("Challenged Decision"). In that decision, the Sole Arbitrator determined that the Athlete committed anti-doping rule violations ("ADRVs") in contravention of Rule 32.2(b) of the IAAF Rules.
5. This is not a typical doping appeal: there is no official positive test result of a sample collected from the Athlete. The evidence in this case stems from the two reports of Prof. Richard H. McLaren (the "McLaren Reports") and the underlying evidence, which was made publicly available, in anonymised form, in the Evidence Disclosure Package ("EDP"). It is the McLaren Reports, and in particular certain EDP documents, upon which IAAF relies in seeking to prove that the Athlete has committed ADRVs.
6. It is recalled that on 19 May 2016, the World Anti-Doping Agency ("WADA") announced the appointment of Prof. McLaren as an Independent Person to conduct an investigation of allegations made by Dr. Grigory Rodchenkov, the former Director of the Moscow Anti-Doping Centre in Russia ("Moscow Laboratory"). In his first report, submitted to WADA on 16 July 2016 ("First McLaren Report"), Prof. McLaren concludes that:
 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 athletes' analytical results or sample swapping, with the active participation and assistance of the FSB, CSP, and both Moscow and Sochi Laboratories".*
7. Prof. McLaren's second report, submitted to WADA on 9 December 2016 ("Second McLaren Report"), detailed the work of his investigative team and sought to confirm the findings of the First McLaren Report.

A. Notification of Anti-Doping Rule Violations

8. By letter dated 27 October 2017, the Athletics Integrity Unit (“AIU”), on behalf of the IAAF, informed the Athlete that he would be charged with one or more ADRVs. These were said to be “*in connection with*” the McLaren Reports. The AIU describes the following three “*counter-detection methodologies*” which it states were uncovered by Prof. McLaren:

(a) Disappearing Positive Methodology

- a. Where the initial screen of a sample revealed an adverse analytical finding (“AAF”), the athlete in question would be identified and the Russian Ministry of Sport would, through a liaison person, decide either to “*SAVE*” or “*QUARANTINE*” the athlete.
- b. The AAF would typically be notified by email from the Moscow Laboratory to one of the liaison persons, who would then respond in order to advise whether the athlete should be “*SAVED*” or “*QUARANTINED*”.
- c. If an athlete was “*SAVED*”, the Moscow Laboratory would report the sample as negative in the Anti-Doping Administration and Management System (“ADAMS”) and manipulate the Laboratory Information Management System (“LIMS”). If the athlete was “*QUARANTINED*”, the analytical bench work on the sample would continue and the AAF would be reported in the normal way.

(b) Sample Swapping Methodology

- a. This involved the replacing of ‘dirty’ urine with ‘clean’ urine. This necessitated the removing and replacing of the cap on sealed B sample bottles through a technique developed and implemented by a team of the Russian Federal Security Service (FSB) known as the ‘magicians’.
- b. The Sample Swapping Methodology was trialled with respect to a limited number of athletes at *inter alia* the 2013 IAAF World Championships in Moscow, rolled out in more systematic fashion at the 2014 Winter Olympic Games in Sochi and continued in operation thereafter with respect to samples stored in the WADA-accredited laboratory in Moscow.
- c. The Sample Swapping Methodology was facilitated by the establishment and maintenance of a ‘clean urine bank’ at the Moscow Laboratory, comprising of unofficial urine samples provided by certain athletes that were analysed, stored and recorded in schedules in the Moscow Laboratory.
- d. The ‘magicians’ would be called into the Moscow Laboratory on a monthly basis to remove the caps of the B samples that needed to be swapped.

(c) Washout Testing

- a. The McLaren Reports describe a programme of washout testing prior to certain major events, including the 2012 London Olympic Games and the 2013 Moscow World Championships.
 - b. Washout testing was deployed in 2012 to determine whether the athletes on a doping program were likely to test positive at the 2012 London Olympic Games.
 - c. At that time, the relevant athletes were providing samples in official doping control Berek kits. Even when the samples screened positive, they were automatically (*i.e.* without the need for a specific “*SAVE*” order) reported as negative in ADAMS.
 - d. The Moscow Laboratory developed schedules to keep track of athletes subject to washout testing, using official Berek kits, in advance of the 2012 London Olympic Games (the “London Washout Schedules”).
 - e. The Moscow Laboratory realised that, as the Berek kits were numbered and could be audited, seized or tested, it would only be a matter of time before it was discovered that the contents of the samples would not match the entries in ADAMS/LIMS. Therefore, the washout testing programme evolved prior to the 2013 Moscow World Championships whereby washout testing would no longer be performed using official Berek kits, but instead with non-official containers such as Coke bottles or baby bottles.
 - f. This unofficial washout testing consisted of collecting samples at regular intervals and testing those samples for quantities of prohibited substances to determine the rate at which those quantities were declining so that there was certainty that the athlete would test clean in competition. If the washout testing determined that the athlete would not test clean at the competition, the athlete was left at home.
 - g. The Moscow Laboratory developed schedules to keep track of those athletes who were subject to the unofficial washout testing scheme (the “Moscow Washout Schedules”).
9. In its letter of 27 October 2017, the AIU informed the Appellant that he was one of the athletes identified by Prof. McLaren as being involved in, or benefitting from, the doping scheme and practices described in the McLaren Reports. The AIU provided the following summary of evidence against the Athlete:

“(i) London Washout Testing

11. *Three of your (official) doping control samples feature on the London Washout Schedules as follows: (i) sample 2730565 collected on 16 July 2012 (see, for example, EDP0019), (ii) sample 2727722 collected on 21 July 2012 (see, for example, EDP0021) and (iii) sample 2727845 collected on 27 July 2012 (see, for example, EDP0024).*
12. *The following information is recorded on the London Washout Schedules in respect of the 16 July 2012 sample (see EDP0019):*

- *Dehydroepiandrosterone*
 - *Desoxymethyltestosterone 460,000*
 - *T/E 10*
 - *Phtalates (blood transfusion?)*
13. *The following information is recorded on the London Washout Schedules in respect of the 21 July 2012 sample (see EDP0021):*
- *Desoxymethyltestosterone 40,000*
 - *T/E 10*
14. *The following information is recorded on the London Washout Schedules in respect of the 27 July 2012 sample:*
- *T/E 6*
15. *All three samples were reported as negative in ADAMS.*

(ii) Sample 2747269 – High T/E Value

16. *In an email dated 19 October 2012 to inter alia Liaison Person Zbelanova, the latter was informed that your sample with Code number 2747269 and collected on 12 October 2014 had revealed a T/E ratio of 9.5. This is described in the email as a ‘suspiciously high value’ (see EDP1182).*
17. *Sample 2747269 was reported as negative in ADAMS.*

(iii) Moscow Washout Testing

18. *Three (unofficial) samples on the Moscow Washout Schedules are listed as belonging to you; they date from 6, 17 and 25 July 2013 respectively (see for example EDP0028).*
19. *It is indicated on the face of the Moscow Washout Schedules that you are following a ‘heavy scheme!!!.’*
20. *The following information is recorded on the Moscow Washout Schedules in respect of the 6 July 2013 sample:*
- *T/E 15*
 - *Nandrolone 200,000 (impurity)*
 - *Trenbolone 15m*
 - *Oxandrolone 50m*
 - *Metenolone 50m*
21. *The following information is recorded on the Moscow Washout Schedules in respect of the 17 July 2013 sample:*
- *T/E 9*
 - *Oxandrolone 30,000*
22. *The following information is recorded on the Moscow Washout Schedules in respect of the 25 July 2013 sample: T/E 6. The sample is considered to be ‘clear’.*

(iv) Sample 2868440 – DPM for Ostarine and Oral Turinabol from March 2014

23. *In an email dated 2 March 2014 to Dr. Rodchenkov, the latter was informed that your sample with Code number 2868440 and collected on the occasion of a training camp in Novogorsk on 26 February 2014 had tested positive for ‘ostarine in very trace amounts’ and ‘trace oral- turinabol (but possible)’ (see EDP0276).*
24. *Ostarine and Oral Turinabol (which is a commercial synonym for dehydrochloromethyltestosterone) are Exogenous Androgenic Anabolic Steroids prohibited under section S.1(a) of the WADA Prohibited List.*
25. *Pursuant to an email from Liaison Person Alexey Velikodniy to the Moscow Laboratory dated 3 March 2014, sample 2868440 was ‘SAVED’ along with nine other samples (EDP0278).*
26. *Dr. Rodchenkov responded to the email from Alexey Velikodniy later on the same day in the following terms:*

I can’t just ignore CLEARLY POSITIVE samples in front of everybody.

Where on earth are they planning to go? To get caught with their pants down??

I am personally responsible for accreditation and performance at both laboratories: Sochi and Moscow

And I won’t cover up for some freaks at the cost of tremendous and unjustified risks, furthermore, all samples collected 3 months prior to the World Championship IAAF are considered pre-competition and could be called back to Cologne or Lausanne for the retest in an instance [...]’.

27. *Sample 2868440 was reported as negative in ADAMS.*

(v) Sample 2920565 – DPM for Boldenone from July 2014

28. *In an email dated 22 July 2014 to Dr. Rodchenkov and Alexey Velikodniy (EDP0432), sample 2920565 was recorded as having a T/E of 5.5 and boldenone (although the latter was stated to be possibly endogenous with an IRMS being required).*
29. *Boldenone is an Exogenous Androgenic Anabolic Steroid prohibited under section S.1(a) of the WADA Prohibited List.*
30. *Alexey Velikodniy advised that the sample should be “SAVED” pursuant to an email to Dr. Rodchenkov on 22 July 2014 (EDP0434).*
31. *Sample 2920565 was reported as negative in ADAMS”².*

10. The AIU informed the Athlete that the IAAF considered these matters to constitute a violation of Rule 32.2(b) of the IAAF Rules. It was on this basis that the Athlete was charged with using prohibited substances during the period 2012 to 2014, in particular a range of exogenous anabolic steroids.

² Footnotes omitted.

11. The AIU also notified the Athlete that the IAAF intended to seek an increased period of ineligibility up to the maximum of four years pursuant to Rule 40.6 of the IAAF Rules on the basis of aggravating circumstances.
12. The IAAF granted the Athlete an opportunity to admit the violations by 10 November 2017 or to provide his explanations by 17 November 2017. Further, the IAAF informed the Athlete that if he admitted the violations by 10 November 2017, he could avoid the application of the increased sanction and limit his period of ineligibility to two years.

B. First instance proceedings before the Court of Arbitration for Sport

13. On 11 November 2017, the Athlete informed IAAF that he never committed any doping offense and therefore could not admit the alleged violations.
14. On 16 November 2017, the Athlete further disputed the allegations. The IAAF, therefore, informed the Athlete that his case would be referred to the Court of Arbitration for Sport (“CAS”).
15. On 12 January 2018, the AIU invited the Athlete to choose between the following two procedures:
 - a. A first-instance hearing at the CAS before a Sole Arbitrator pursuant to IAAF Rule 38.3, whereby the decision would be subject to appeal to CAS in accordance with Rule 42; or
 - b. A hearing before a CAS Panel as a single hearing, subject to the agreement of WADA, in accordance with IAAF Rule 38.19, whereby the decision would not be subject to appeal save, in limited circumstances, to the Swiss Federal Tribunal.
16. Whereas the Athlete opted for a single instance decision under Rule 38.19 of the IAAF Rules, WADA did not consent. Therefore, the matter was submitted to the CAS under Rule 38.3 of the IAAF Rules.
17. On 6 April 2018, the IAAF filed its Request for Arbitration with the Ordinary Division of the CAS against the Russian Athletics Federation (“RUSAF”) and the Athlete in accordance with Articles R38 and R51 of the CAS Code of Sports-related Arbitration (the “Code”).
18. On 31 January 2019, after considering the parties’ written and oral submissions, and evidence, the Sole Arbitrator rendered the Challenged Decision as follows:

“The Court of Arbitration for Sport rules that:

1. *The Request for Arbitration filed by the International Association of Athletics Federations (IAAF) with the Court of Arbitration for Sport (CAS) against the Russian Athletics Federation (RUSAF) and Mr. Lyukman Adams on 6 April 2018 is admissible and partially upheld.*

2. *Mr. Lyukman Adams committed anti-doping rule violations according to Rule 32.2(b) of the 2014 IAAF Competition Rules.*
3. *Mr. Lyukman Adams is sanctioned with a period of ineligibility of four (4) years starting on the date of notification of the present award.*
4. *All competitive results obtained by Mr. Lyukman Adams from 16 July 2012 through to 14 September 2014 included shall be disqualified, with all of the resulting consequences, including the forfeiture of any titles, awards, medals, points, prizes and appearance money.*
5. *The costs of this arbitration, to be determined and served upon the Parties by the CAS Court Office, shall be borne by the Russian Athletics Federation (RUSAF).*
6. *The Russian Athletics Federation (RUSAF) and Mr. Lyukman Adams shall each bear their own costs and are jointly and severally ordered to pay to the International Association of Athletics Federations (IAAF) the amount of CHF 10'000 (ten thousand Swiss Francs) as a contribution towards the International Association of Athletics Federations' legal fees and expenses incurred in relation to the present proceedings.*
7. *All other or further motions or prayers for relief are dismissed”.*

III. THE PRESENT APPEAL PROCEEDINGS BEFORE THE COURT OF ARBITRATION FOR SPORT

19. On 21 February 2019, the Appellant filed a Statement of Appeal with the CAS against the Respondent in respect of the Challenged Decision in accordance with Article R47 *et seq.* of the Code. Within the Appellant's Statement of Appeal, he nominated Prof. Michael Geistlinger as arbitrator.
20. Together with his Statement of Appeal, the Appellant filed a request for provisional measures, specifically a stay of the Challenged Decision, in accordance with Article R37 of the Code.
21. On 6 March 2019, the Respondent filed its response to the Appellant's request for provisional measures.
22. On 26 March 2019, the Respondent nominated Mr. Romano Subiotto QC as arbitrator.
23. On 3 April 2019, the Appellant filed his Appeal Brief in accordance with Article R55 of the Code.
24. On 2 May 2019, the CAS Court Office, on behalf of the President of the Appeals Arbitration Division, confirmed the appointment of the Panel in this appeal as follows:

President: Mr. Stephen Drymer, Attorney-at-Law in Montreal, Canada
Arbitrators: Prof. Michael Geistlinger, Professor of Law in Salzburg, Austria

Mr. Romano F. Subiotto QC, Avocat in Bruxelles, Belgium and Solicitor-Advocate in London, United Kingdom

25. On 23 May 2019, the CAS Court Office, on behalf of the Panel, informed the parties that the Appellant's request for a stay, as formulated in his Statement of Appeal, did not appear to form part of his case as pleaded in the Appeal Brief. Consequently, the Panel invited the Appellant to state whether it should consider his request for a stay abandoned, or alternatively, whether he maintained his request.
26. On 24 May 2019, the IAAF filed its Answer in accordance with Article R55 of the Code.
27. On 28 May 2019, the Appellant confirmed that he maintained his request for the stay of the execution of the Challenged Decision.
28. On 14 June 2019, the CAS Court Office informed the parties that Prof. Geistlinger had resigned from the Panel. The Appellant was therefore invited to re-appoint an arbitrator from the list of CAS arbitrators.
29. Also on 12 June 2019, the CAS Court Office informed the parties that Mr. Rémi Reichhold had been appointed as *ad hoc* clerk to assist the Panel.
30. On 12 July 2019, the Appellant appointed Ms. Carine Dupeyron as arbitrator in this procedure.
31. On 17 July 2019, the CAS Court Office, on behalf of the President of the Appeals Arbitration Division, confirmed the appointment of Ms. Dupeyron to the Panel in the place of Prof. Geistlinger.
32. On 14 August 2019, the Panel issued a decision in respect of the Athlete's request for provisional measures, dismissing the request on the basis that the Appellant failed to demonstrate that the provisional relief sought was necessary to protect him from irreparable harm.
33. On 2 March 2020, both the Respondent and the Appellant returned signed copies of the order of procedure to the CAS Court Office. The IAAF had added a hand-written annotation to the order of procedure, stating that: "[t]he Respondent challenged the admissibility of the appeal and in the alternative the jurisdiction of CAS based on the failure to nominate RUSAF as Respondent".
34. The hearing in this appeal was held on 3 March 2020 in Lausanne, Switzerland. The Panel was assisted at the hearing by Mr. Brent J. Nowicki, Managing Counsel at the CAS Court Office and Mr. Rémi Reichhold, *ad hoc* clerk.
35. The participants at the hearing on behalf of the parties were are follows:

For the Athlete

- Mr. Lyukman Adams (by videoconference)

- Mr. Philippe Bärtsch, Dr. Stefan Leimgruber, Mr. Damien Clivaz and Mr. Simon Demaurex (counsel)
- Mr. Kirill Burkhard (paralegal)
- Mr. Manuel Rundt (forensic and security IT expert) (by videoconference)
- Prof. Michael Graham (doping expert) (by videoconference)
- Ms. Ekaterina Shutova (interpreter)

For the IAAF

- Mr. Ross Wenzel and Mr. Nicolas Zbinden (counsel)
 - Dr. Grigory Rodchenkov (witness) (by videoconference)
 - Mr. Andrew Sheldon (computer forensic expert) (by videoconference)
 - Prof. Christiane Ayotte (doping expert)
 - Prof. Christophe Champod (forensic science expert)
 - Ms. Olympia Karavasili (representative of the AIU)
36. During the hearing, the Panel invited all witnesses and interpreters to tell the truth, subject to the sanction of perjury under Swiss law.
37. At the close of the hearing, both parties confirmed that they had received a fair hearing and had been given the opportunity to fully present their cases.
38. The legal representatives acting for the Athlete in this case also represent four other Russian athletes who, in common with the Appellant, were all found guilty of ADRVs by a Sole Arbitrator at first instance and sanctioned to a period of ineligibility of four years. All four athletes, like the Appellant in this case, have appealed the first instance decisions to the CAS. The athletes and the IAAF are represented by the same legal team in all five appeals. For purposes of efficiency and expediency, the five appeals have been run in parallel; albeit there was a separate hearing for the four other appeals before a different panel (which includes two members of this Panel). To be clear, the Panel in this procedure has approached its task solely on the basis of the correspondence, legal arguments, witness evidence and testimony filed in this case and insofar as it is relevant to the Athlete. Any correspondence, legal arguments, witness evidence and testimony filed for the purposes of another procedure has not in any way influenced the Panel's decision in relation to the individual Athlete in this case.

IV. SUBMISSIONS OF THE PARTIES

39. What follows is a concise summary of the legal arguments advanced by the parties on the issues of jurisdiction, admissibility and the merits. This summary is not exhaustive and contains only those arguments the Panel considers necessary to give context to the decision it reaches in each of the sections below in relation to the jurisdiction of the CAS to hear the case, the admissibility of the appeal and the merits of the appeal. For the avoidance of doubt, the Panel has carefully considered all of the written and oral submissions of the parties, including the exhibits and witness testimony.

A. Jurisdiction and Admissibility

40. In his Statement of Appeal and Appeal Brief, the Athlete asserts that the Panel has jurisdiction to decide this case.
41. In contrast, the IAAF argues that the appeal is inadmissible (or in the alternative that the Panel lacks jurisdiction) due to “*the failure*” of the Athlete to “*nominate RUSAF as a mandatory respondent*” in this appeal:
- a. The basis for CAS jurisdiction at first instance was Rule 38.3 of the IAAF Rules. This expressly requires RUSAF to be included as a respondent to this appeal.
 - b. RUSAF had the authority and responsibility to render the disciplinary decision in relation to the Athlete; the CAS was effectively acting by delegation from RUSAF in operation of the IAAF Rules. The IAAF had no authority under the IAAF Rules to render a decision pertaining to the Athlete.
 - c. With respect to “*vertical decisions*”, the entity that rendered, or is responsible for, the challenged decision must be included as a respondent. The requirement to nominate the body with decision-making authority as a respondent also applies where the decision is ultimately taken by a third party by way of delegation.
 - d. In this case, the requirement to include RUSAF as a respondent, even where the Challenged Decision was rendered by the CAS, is expressly stated in Rule 42.18 of the IAAF Rules.
 - e. The Challenged Decision is attributable to RUSAF and not to IAAF.
 - f. The CAS has held that that an arbitration cannot proceed against a respondent in similar circumstances (CAS 2005/A/835).
42. In a letter to the CAS Court Office dated 14 June 2019 and at the hearing, the Athlete argued that the appeal is admissible on the basis that:
- a. In its Request for Arbitration at first instance, the IAAF asserted that RUSAF was not in a position to conduct a hearing and as a result the IAAF had the authority to refer the case to the CAS pursuant to Rule 38.3 of the IAAF Rules. In these circumstances, authority remains with the IAAF and there is no requirement to add RUSAF as a respondent.
 - b. The IAAF Rules provide that – in normal circumstances – a member *may* delegate its authority to IAAF. This is not the case here, where RUSAF’s membership was suspended.
 - c. In CAS 2017/A/4949, a situation identical to that of the Appellant, the IAAF was nominated as the sole respondent in the appeal proceedings. In that case, neither the IAAF nor the CAS panel took issue with RUSAF having no role.

B. Merits

43. By way of this appeal, the Athlete challenges three findings of the Sole Arbitrator in the Challenged Decision:
- a. that the Athlete is guilty of committing ADRVs;
 - b. sanctioning the Athlete to a period of ineligibility of four years as from 31 January 2019; and
 - c. disqualifying the Athlete's results from 16 July 2012 to 14 September 2014.
44. The Athlete's submissions on the merits, as set out in his Statement of Appeal and Appeal Brief and at the hearing may be summarised as follows:

(a) *The Challenged Decision*

- a. The Challenged Decision is "*severely biased*" and "*flawed in many respects*". In particular, the Sole Arbitrator acknowledged discrepancies in the EDP but decided that this did not undermine its probative value and "*arbitrarily decided to alleviate*" the IAAF of its burden of proof.
- b. The Sole Arbitrator found that Dr. Rodchenkov is "*absolutely credible*" despite the fact that his testimony has been found to be "*mere hearsay*" and "*unsubstantiated by evidence*" by other CAS panels (CAS 2017/A/5379).
- c. In contrast, the Sole Arbitrator held, without justification, that the Athlete's evidence was "*not fully credible*" and inferred that the Athlete must have participated in a centralised "*doping plan or scheme*", increasing the period of his ineligibility on the basis of aggravating circumstances.

(b) *The burden and standard of proof*

- d. The Panel must determine whether there is any basis for an ADRV finding specifically in relation to the Athlete. Pursuant to Rule 33.1 of the IAAF Rules, the burden of proof is on the IAAF to establish an ADRV "*to the comfortable satisfaction of the relevant hearing panel, bearing in mind the seriousness of the allegation which is made*" (CAS 2004/O/649; CAS 2014/A/3625; CAS 2014/A/3630).
- e. The IAAF must discharge its burden of proof by actively substantiating its allegations with convincing evidence. This must allow the Athlete to substantiate his challenge, or adduce counter evidence (CAS 2016/A/4875; CAS 2016/A/4741; CAS 2016/A/4573; CAS 2013/A/3097).
- f. Rule 33.1 of the IAAF Rules specifies that "*the standard of proof in all cases is greater than a mere balance of probability but less than proof beyond a reasonable doubt*". Rule 33.3 further states

that “*anti-doping rule violations may be established by any reliable means, including but not limited to admissions, evidence of third Persons, witness statements, expert reports, documentary evidence, conclusions drawn from longitudinal profiling and other analytical information*”.

- g. The IAAF has failed to discharge its burden of proof. There is no reliable documentary, witness, or expert evidence that meets the required standard. The Athlete cannot ascertain the provenance and authenticity of the evidence against him and is not in a position to understand the evidence brought against him, let alone counter such evidence.

(c) *The evidence against the Athlete*

- h. During his professional career spanning 15 years, the Athlete has undergone numerous doping tests in Russia and abroad and has never tested positive. He is and has always been a clean athlete.
- i. Prof. McLaren acknowledges that his reports do not constitute, and were never intended to constitute, evidence to prove ADRVs against any individual athlete. Sports federations such as FIFA and several CAS panels have reached the conclusion that the McLaren Reports cannot serve as proof of an ADRV by an individual athlete.
- j. There are numerous flaws, or at least limitations, in the McLaren Reports. When challenged, Prof. McLaren’s investigation has been found to be questionable. Prof. McLaren relied almost exclusively on the EDP to conduct his investigation. There were no on-site investigations at the Moscow Laboratory or the Sochi Laboratory and he did not interview any of the individuals mentioned in his reports. Prof. McLaren did an important job in a very short time-frame, but there were a number of things he was not able to verify.
- k. The totality of evidence upon which the IAAF relies to prove that the Athlete committing ADRVs is limited to:
 - (i) the purported London Washout Schedules and Moscow Washout Schedules (the “Washout Schedules”); and
 - (ii) six emails from 2012 to 2014, allegedly referring to samples taken from the Athlete (the “Emails”).

The London Washout Schedules

- l. According to the IAAF, the Athlete committed ADRVs by reference to three entries in the so-called London Washout Schedules (EDP0019, EDP0021 and EDP0024). It is unclear who created these documents and when they were created. There is also no evidence supporting the IAAF’s allegation that the Athlete was part of a washout testing programme or that he even knew about such a programme.

- m. EDP0019, EDP0021 and EDP0024 refer to three sample numbers pertaining to the Athlete: 2730565; 2727722; and 2727845.
- (i) The first sample (2730565), which appears in EDP0019, allegedly contained dehydroepiandrosterone, desoxymethyltestosterone (“DMT”), phthalates and had a testosterone/epitestosterone (“T/E”) ratio of 10. The Athlete does not dispute that he provided a sample with this number, but he rejects that it contained any prohibited substances.
 - (ii) The second sample (2727722) appears in a table on the first page of EDP0021. The second page of that document purports to show a positive doping test. However, there is nothing to indicate that sample 2727722 on the first page is linked to the alleged positive test result on the second page.
 - (iii) The third sample (2727845) appears in EDP0024. It indicates a T/E ratio of 6, but there is no trace of prohibited substances. An elevated T/E ratio does not, of itself, indicate that an athlete has taken prohibited substances. The Athlete has a naturally elevated endogenous T/E ratio.
- n. All the relevant entries in the ADAMS database, which is the only official and reliable system containing results of athlete testing, do not reveal any prohibited substances. The mere fact that Dr. Rodchenkov claims that results were wrongly reported in ADAMS, without further corroboration, cannot constitute sufficient proof of an ADRV. The evidence of Prof. Graham (the Athlete’s doping expert) confirms that the information contained in the London Washout Schedules is not scientifically credible.
- o. The Athlete provided a urine sample at the London Olympic Games on 6 August 2012 which tested negative. This sample was later retested in 2016 with improved methods and again did not show any trace of prohibited substances (in contrast to the re-analysis of other athletes appearing in the London Washout Schedules). Prof. Graham has found that: *“In view of the detection window of the prohibited substances allegedly taken by Mr Adams in July 2012, metabolites of Desoxymethyltestosterone should have been found during those tests assuming he had been doping as the IAAF alleges”*. Nothing was found.
- The Moscow Washout Schedules*
- p. The IAAF also relies on the so-called Moscow Washout Schedules (EDP0028) to argue that the Athlete was unofficially tested for prohibited substances in July 2013. The information contained in this document is inaccurate and not scientifically credible:
- (i) The Athlete has never provided unofficial samples and the IAAF has produced no evidence to prove otherwise. The IAAF has failed to explain who collected these unofficial samples; where and how they were collected; how it can be ascertained that they belong to the Athlete; and who conducted the analysis and where it was conducted (if at all).

- (ii) The only link between the Athlete and the Moscow Washout Schedules is the fact that his name appears in EDP0028.
- (iii) The authenticity of EDP0028 cannot be determined and its content is unreliable because there are discrepancies in the purported sample testing results in different versions of the Moscow Washout Schedules. For example, EDP0028 and EDP0029 are identical at first glance, but the purported level of methasterone in row 17 (in relation to a different athlete). The content of these documents is “*utterly unreliable*” and the inconsistencies can only be explained by the fact that they must have been manipulated by persons who did not know what they were doing.
- (iv) The fact that there are several versions of the Moscow Washout Schedules, with different and inconsistent data for the same alleged washout tests can only lead to the conclusion that these documents have been edited and amended several times and do not reflect true and accurate facts.
- (v) Prof. Graham has identified various examples of information that is not scientifically credible in the Moscow Washout Schedules.
- (vi) It would have made no sense for the Athlete to participate in the Moscow Washout Programme in light of his personal circumstances. He underwent an ankle operation in February 2013 from which he was still recovering in July 2013.
- (vii) The Athlete tested negative at the Russian National Championships on 24 July 2013.

The Emails

- q. In addition to the Washout Schedules, the IAAF also relies on six emails:

Email 1

- (i) The first email is purportedly dated 19 October 2012, timed 11:09:33, from Dr. Tim Sobolevsky (tim.sobolevsky@gmail.com) to Ms. Natalia Zhelanova (zhelanova2@minstm.gov.ru) and “jelanchik@rambler.ru”, stating in part:

*“2747269, M, track and field, UTS [meaning ‘training camp’] (1237), RU Kislovodsk
date of testing 2012-10-12*

S1. T/E = 9.5 (suspiciously high value)”

(EDP1182) (“Email 1”).

Email 2

- (ii) The second email is purportedly dated 2 March 2014, timed at 08:23, from Dr. Sobolevsky to Dr. Rodchenkov (grodchen@yandex.ru), stating in part:

*“2868440, M, athletics, RU Novogorsk, collection 2014-02-26, training camp | 5988
ostarine in very trace amounts, trace oral-turinabol (but possible...)”*
(EDP0276) (“Email 2”).

Email 3

- (iii) The third email is purportedly dated 3 March 2014, timed at 10:20, from Mr. Aleksey Velikodny (avsochi2014@gmail.com) to Dr. Rodchenkov, Dr. Sobolevsky and Mr. Kamaev Nikita Olegovich (sportmed@rusada.ru) stating in part:

*“Athletics, away 05.03.2014 at World Championship in Poland (Sopot, 7-9 March).
Collection 26-27 February in Novogorsk:
2868440 Adams Lukman, TE=8,9,
DOB 24.09.1988, Specialisation Long, Triple”*
(EDP0278) (“Email 3”).

Email 4

- (i) The fourth email is purportedly dated 3 March 2014, timed at 14:55, from Dr. Rodchenkov to Mr. Velikodny, Dr. Sobolevsky and Mr. Olegovich, which makes no reference to sample 2868440 and states:

*“Dear Aleksey,
I can’t just ignore CLEARLY POSITIVE samples in front of everybody
where on earth are they planning to go?? to get caught with their pants down?
I am personally responsible for accreditation and performance of both laboratories: Sochi and
Moscow
and I won’t cover up for some freaks at the cost of tremendous and unjustified risks, furthermore,
all samples collected 3 months prior to the World Championship IAAF are considered pre-
competition and could be called back to Lausanne or Cologne for the retest in an instance
as a result – three corpses that can’t be revived: Neryantseva, Birukova, Semakin – and let them
sort it out with their suppliers, doctors and advisers
others are still breathing so far...
thanks
GM Rodchenkov”*

(EDP0279) (“Email 4”).

Email 5

- (ii) The fifth email is purportedly dated 22 July 2014, timed at 11:47, from Dr. Sobolevsky to Mr. Velikodny and Dr. Rodchenkov stating in part:

*“2920565, MT/E=5,5 and boldenone (quite possibly it’s an endogenous boldenone,
IRMS is required...)”*

(EDP0432) (“Email 5”).

Email 6

- (iii) The sixth email is purportedly dated 22 July 2014, timed at 15:07, from Mr. Velikodny to Dr. Rodchenkov and Dr. Sobolevsky, stating in part:

“*SAVE*
2920565, Adams Lukman Rasakovich, DOB 1988, triple, athletics, training camp |
6051/14, RU Novogorsk, collection 2014-07-18, (IIR) T/E=5,5 and boldenone –
anabolic steroid (quite possibly it’s an endogenous boldenone, IRMS is required..)”
(EDP0434) (“Email 6”).

- r. The Emails do not establish that the Athlete was a “*protected athlete*”, or that he committed any ADRVs:
- (i) The Athlete has never been in contact with Dr. Rodchenkov or Mr. Velikodny. The only link between the Emails and the Athlete are the sample numbers.
 - (ii) Samples 2747269, 2868440 and 2929565 are recorded as clean on the ADAMS system.
 - (iii) Sample 2747269 was subjected to Isotope Ratio Mass Spectrometry testing, which confirms the endogenous origin of the Athlete’s elevated T/E ratio.
 - (iv) The evidential value of the Emails is undermined by their content. The use of word “*possible*” in Email 2 shows that the presence of anabolic steroids has not been confirmed. Email 3 makes no reference to the presence of anabolic steroids, only suggesting a T/E ratio of 8.9, which is of endogenous origin.
 - (v) On 7-9 March 2014, only a few days after Email 3 and Email 4 were sent, the Athlete participated in the IAAF World Indoor Championships in Poland. The Athlete underwent a doping test on 9 March 2014 and tested negative.
 - (vi) If Dr. Rodchenkov’s testimony about the creation of a category of protected athletes is true (*quod non*), the fact that “*SAVE*” appears in Email 6 confirms that the Athlete was not a protected athlete.

(d) *The authenticity of the EDP documents*

- s. The origin and authenticity of the EDP cannot be verified:
- (i) The Athlete is confronted with an impossible situation: he is wrongly accused and prevented from proving that the EDP documents are not authentic because the IAAF has not adduced the original documents.

- (ii) The origin of these documents “*remains dubious*”. It is impossible for the Athlete, or anyone else, “*to verify who created these documents, when and why*”. They could easily have been manipulated, without leaving a trace.
- (iii) Mr. Rundt (the Athlete’s IT expert) has determined that the authenticity of the EDP documents cannot be verified in forensic terms. An analysis of the timestamps on the EDP documents show that they were extracted, copied and modified in 2016; the original timestamps “*were not preserved or handled in a forensically sound manner*”.
- (iv) The mere fact that there is no (apparent) sign of forgery does not suffice to prove the authenticity of the EDP documents.
- (v) There is no evidence as to:
 - who allegedly provided the Athlete with prohibited substances, how and when;
 - when the samples were allegedly taken and by whom;
 - how and when they were allegedly brought to the Moscow Laboratory;
 - by whom they were allegedly received in the Moscow Laboratory;
 - how they were stored and attributed to athletes;
 - by whom, when and, most importantly, how they were allegedly tested at the Moscow Laboratory;
 - who allegedly entered the data into the Washout Schedules; and
 - whether the alleged test results were correctly reported in the Schedules.

(e) *The evidence of Dr. Rodchenkov*

- t. Dr. Rodchenkov’s evidence is self-serving, inherently unreliable and should be ignored, or at best, afforded very limited weight:
 - (i) Dr. Rodchenkov was found to be behind a positive drug test cover-up scheme and requested bribes from athletes for his own financial gain. At first, he denied wrongdoing, but then sought to blame others for his conduct. After he left Russia for the United States, he took the story to the press, and only later to the authorities. Whereas the story was a financial success for Dr. Rodchenkov, his narrative has shifted and changed.
 - (ii) Other CAS panels have concluded that – if anything – only “*limited weight*” can be given to Dr. Rodchenkov’s testimony (CAS 2017/A/5379). A WADA Independent Commission Report of 9 November 2015 found Dr. Rodchenkov to be an “*obstructive*” individual who is “*not credible*”.

- (iii) Dr. Rodchenkov's witness statement does not discuss the evidence against the Athlete and does not address anything relating to this case, apart from a single sentence stating that "*I am aware that [the Athlete] benefitted from the Program and [was] engaged in doping over the course of years*".
- (iv) At the first instance hearing in this case, Dr. Rodchenkov stated that he had not prepared the London Washout Schedules; never met the Athlete; never given the Athlete take any prohibited substances or witnessed him doing so; and was not involved in the testing of any of the Athlete's samples.
- (v) Large parts of Dr. Rodchenkov's testimony is uncorroborated hearsay.

(f) Ineligibility

- u. In any event, the conditions for increasing the Athlete's period of ineligibility, pursuant to Rule 40.6 of the IAAF Rules, are not met.
 - (i) Rule 40.6 requires aggravating circumstances to be established in each individual case.
 - (ii) There is no evidence that the Athlete used prohibited substances on multiple occasions, nor that he personally participated in an alleged doping scheme.
 - (iii) CAS case law requires "*particularly cogent evidence*" of an athlete's "*deliberate personal involvement*" in wrongdoing. It must be established that the Athlete "*knowingly engaged*" in the alleged doping scheme (CAS 2017/A/5379).
- v. In the alternative, if the Panel concludes that there is evidence of aggravating circumstances (*quod non*), the period of ineligibility should be reduced to less than the four-year maximum provided for by Rule 40.6. Even in "*severe and well-documented*" ADRV cases, CAS panels have imposed ineligibility periods below four years (CAS 2014/A/3561 and CAS 2014/A/3614; CAS 2014/A/3668). A shorter period of ineligibility is applicable where aggravating circumstances "*are not clearly established*" (CAS 2012/A/2791).

(g) Disqualification

- w. There is no basis for the disqualification of any of the Athlete's results under Rule 40.8 of the IAAF Rules:
 - (i) The purpose of disqualification of competitive results is not to punish athletes, but to correct any unfair advantage and remove tainted performances from the record (CAS 2017/A/5021; CAS 2016/O/4463).
 - (ii) Rule 40.8 contains an "*implicit exception of fairness*" by which the Panel should evaluate the circumstances, including *inter alia* the nature and severity of the infringement, the lapse of time between ADRVs, the presence of negative tests between ADRVs,

the effect of the infringement on the results at stake and the absence of subsequent abnormalities or ADRVs.

- (iii) All of the samples produced by the Athlete (including during competitions attended in 2012-2014) have tested negative.
 - (iv) It is undisputed that the Athlete did not violate any anti-doping rule before 16 July 2012, between 12 October 2012 and 6 July 2013, or after July 2014.
- x. In the alternative, if the Panel considers that some the Athlete's results should be disqualified, the disqualification period should be limited in time:
- (i) The principle of proportionality calls for a reasonable balance between the misconduct and the measure imposed; "*a measure must not exceed what is reasonably required by its legitimate objective*" (CAS 2015/A/4008).
 - (ii) Disqualification should not extend over periods for which there is no clear evidence that the Athlete used prohibitive substances.
 - (iii) If there is a period of disqualification in this case, it should be limited to results obtained between 16 July 2012 until 31 July 2014.
45. The submissions of the IAAF on the merits, as set out in the Answer and presented at the hearing, may be summarised as follows:

(a) *The context of the case against the Athlete*

- a. Prof. McLaren "*uncovered and described a doping scheme of unprecedented proportions that pervaded and implicated the Russian sporting and governmental authorities including the Ministry of sport, the Moscow Laboratory, RUSADA, the FSB and the CSP*".
- b. The IAAF does not seek to prove the charges against the Athlete on the basis of the McLaren Reports alone. The charges are based primarily on the EDP, which underpin the McLaren Reports, including the Washout Schedules and the Emails.

(b) *Establishing the ADRV*

- c. There are two questions for the Panel to answer in determining whether the Athlete has committed an ADRV:
 - (i) Do the relevant EDP documents (*i.e.* the Washout Schedules and the Emails) constitute reliable evidence within the meaning of Rule 33.3 of the IAAF Rules?
 - (ii) If so, do the relevant EDP documents comfortably satisfy the Panel that the Athlete used prohibited substances?

(c) Standard of proof

- d. The Panel can be comfortably satisfied that the Athlete used prohibited substances. Rule 32.3(b) of the IAAF Rules makes clear that it is not necessary to establish intent, negligence, fault or other *mens rea*. The objective fact of the use is sufficient.
- e. Pursuant to Rule 33.3 of the IAAF Rules, the use of prohibited substances can be established by any reliable means.
- f. In a non-analytical case such as this, the Panel “*must consider the global weight of the evidence*”; the various evidentiary elements are “*strands in a cable*” or a “*rope composed of several cords*” rather than “*links in a chain*” (CAS 2015/A/4059; CAS 2018/O/5713).

(d) Reliability of the EDP documents

- g. On the basis of the findings in the McLaren Reports and the IOC Disciplinary Commission’s Report to the IOC Executive Board of 2 December 2017 (“Schmid Report”), it cannot seriously be questioned that there was a doping scheme and cover-up operation in Russia:
 - (i) This has been found to be so in a significant, and ever increasing, number of CAS Awards (CAS OG 16/09; CAS OG 16/012; CAS 2016/A/4745; CAS OG 18/03; CAS OG 18/02; CAS 2018/O/5666-5668, 5671-5676, 5704 & 5712-5713; CAS 2017/O/5039).
 - (ii) Mr. Alexander Zhukov, the then President of the Russian Olympic Committee has been quoted in the Schmid Report as stating that “*all organisations and agencies involved are taking necessary steps to prevent it in the future*”.
 - (iii) Likewise, Mr. Vitaly Mutko, a former Russian Sports Minister and Deputy Prime Minister of Russia, has been quoted as stating that: “*Individual officials who worked in different sport organisations and might have been connected to each other, unfortunately violated the anti-doping rules. They were dismissed from office*”.
 - (iv) Mr. Pavel Kolobkov, former Russian Minister of Sport, “*explicitly accepted the findings of the Schmid Report*” in a letter to WADA dated 13 September 2018.
 - (v) At paragraph 83 of the Challenged Decision, the Sole Arbitrator noted that “*even [the Athlete] and his counsels agreed that the findings of the McLaren Report concerning the existence of an overarching doping scheme in Russia could not be contested*”.
- h. The EDP does not exist in a vacuum. The documents must be considered within the context of the unprecedented doping and anti-detection scheme described in the McLaren Reports and the Schmid Report.

- i. The most relevant EDP documents have been produced “*in their native format*” and “*without any redaction*”. It is clear from the internal metadata, particularly the Washout Schedules, that they were created and worked on at the relevant time in 2012 and 2013.
- j. Taking onto account the broader context and the contemporaneity of the internal metadata, any technical or forensic challenge to the reliability of the Washout Schedules must be specific and compelling.
- k. The evidence of Mr. Rundt is merely a theoretical objection that “*the gold standard of IT forensic practice was not followed*”.
- l. There is no software that would allow anyone to manipulate the relevant data without leaving a trace or forensic artefacts.
- m. Prof. Graham’s expert report is flawed; his assumptions and conclusions are wrong. Prof. Ayotte (the IAAF’s doping expert) has found that the data in the Washout Schedules is plausible from a scientific perspective.

(e) *The evidence against the Athlete*

- n. The Athlete featured in two separate washout programmes in different calendar years. There are five entries involving no fewer than four prohibited substances, including all three ingredients of the “*Duchess cocktail*” (a steroid cocktail optimised to avoid detection allegedly developed by Dr. Rodchenkov).
- o. The evidence against the Athlete comprises the following:
 - (i) Three of the Athletes official doping control samples (2730565, 2727722 and 2727845) feature in the London Washout Schedules (EPD0019, EDP0021 and EDP0024).
 - (ii) Email 1 describes the T/E ratio of 9.5 in sample 2747296 as “*a suspiciously high value*”.
 - (iii) The Athlete has three samples recorded in the Moscow Washout Schedules (EDP0028). It is stated that the Athlete is following a “*heavy scheme!!!*”.
 - (iv) Email 2 states that the Athlete tested positive for “*ostarine in very trace amounts*” and “*trace oral-turinabol (but possible)*”.
 - (v) Email 3 states that sample 2868440 was ‘*SAVED*’.
 - (vi) Email 4, which is Dr. Rodchenkov’s response to Email 3, states *inter alia* “*I can’t just ignore CLEARLY POSITIVE samples in front of everybody ... I won’t cover up for some freaks at the cost of tremendous and unjustified risks, furthermore all samples collected 3 months prior to the World Championship IAAF are considered pre-competition and could be called back to Cologne or Lausanne for the re-test in an instance...*”.

- (vii) Email 5 states that sample 2920565 had a T/E ratio of 5.5 and contained boldenone (although the latter was stated to be possibly endogenous).
- (viii) Email 6 states that sample 2920565 should be '*SAVED*'.

(f) London Washout Schedules

- p. The London Washout Schedules reflect doping that really happened:
 - (i) There are various examples of the London Washout Schedules being attached to contemporaneous emails. The cover emails support the authenticity of the London Washout Schedules.
 - (ii) Mr. Sheldon's analysis (the IAAF's IT expert) of the EDP documents demonstrates that the London Washout Schedules were worked on by various individuals and "*were then attached to real emails on the same day between real people using their actual email address*".
 - (iii) The London Washout Schedules feature positive samples from four other athletes who, in common with the Athlete, were also found guilty of ADRVs by the CAS at first instance.
 - (iv) The London Washout Schedules were corroborated when 13 Russian track and field athletes tested positive for dehydrochloromethyltestosterone ("DHCMT") when their samples were re-tested after 2013 London Olympic Games. These results were not known to Dr. Rodchenkov at the time he provided the EDP documents to authorities in the United States. Ten of those 13 athletes appear in the London Washout Schedules with indications that their samples contained DHCMT.
 - (v) Dr. Rodchenkov confirms that the London Washout Schedules are real contemporaneous documents of which he has first-hand knowledge.
- q. Two of the Athlete's samples on the London Washout Schedules were recorded as positive for DMT, "*a designer, black-market steroid*". There is an indication of a positive finding; the level drops from 460,000 units to 40,000 units in the five days between the two samples. It is, therefore, no surprise that the Athlete tested negative at the London Olympics on 6 August 2012. Prof. Ayotte states that this is a plausible washing out of that substance.

(g) Moscow Washout Schedules

- r. The Moscow Washout Schedules also reflect doping that really happened:
 - (i) Mr. Sheldon has determined that the Moscow Washout Schedules were copied and amended over time. The fact that there are different versions of the Moscow

- Washout Schedules attests to their reliability rather than being an indication of fabrication.
- (ii) Of the approximately 20 athletes that feature in the Moscow Washout Schedules, no fewer than eight have been found guilty of ADRVs unrelated to the McLaren Reports or the EDP.
 - (iii) Like the London Washout Schedules, the Moscow Washout Schedules are corroborated by other documents and events. For instance, the unofficial sample collected from an athlete on 10 July 2013 (not the Appellant) is stated in the Moscow Washout Schedules to contain “*Oxandrolone 8 ng/mL, Testosterone 0.3 ng/mL*”. That athlete was subjected to an official test the next day, which was found to contain oxandrolone.
 - (iv) Dr. Rodchenkov states that the Moscow Washout Schedules are real contemporaneous documents of which he has first-hand knowledge.
- s. Whereas the Athlete appears by sample number in the London Washout Schedules, he appears by name in three entries in the Moscow Washout Schedules. The first sample of 6 July 2013 contains all three components of the “*Duchess cocktail*” *i.e.* methenolone, trenbolone and oxandrolone. Those substances are in significant concentrations and there is a comment that the Athlete was “*following a heavy scheme!!!*”. All of the substances were washed out by the time of the sample on 17 July 2013, except oxandrolone. Prof. Ayotte states that the washout of the substances in the relevant timeframe is plausible.

(h) Emails

- t. The Emails are real, contemporaneous documents and can be relied on:
- (i) The EDP comprises more than 1,000 pages of emails. The “*sheer bulk*” of those emails and “*the level of detail in them*” is not consistent with fabrication. The hundreds of pages of emails relate to different sports, with detailed references to time and place of sample collection, sample code and laboratory codes.
 - (ii) The Emails were sent to *inter alia* Liaison Persons Mr. Velikodny and Ms. Zhelanova; email address can be publicly linked to these persons. Neither has ever come forward to state that they did not receive these emails, or that the content has been modified.
 - (iii) The content of the emails is borne out by reality: in Email 4, Dr. Rodchenkov refuses to “*SAVE*” three athletes (none of whom are the Appellant) and states that they are “*corpses that can’t be revived*”. All three were in fact found guilty of ADRVs in respect of those positive samples.
 - (iv) Mr. Sheldon analysed 11 emails and noted that all the “*hops*” indicated in the headers “*corresponded to what one would expect to see*”. Mr. Sheldon has also stated that four

emails are authentic on the basis of the Domain Keys Identified Mail (“DKIM”) signatures.

(i) Consequences

- u. There are a number of aggravating factors in this case:
 - (i) The Athlete used a range of exogenous anabolic steroids on multiple occasions.
 - (ii) The Athlete featured in two washout programs the purpose of which was to protect athletes known to be doping. He provided unofficial samples and those of his official samples that did test positive for prohibited substances were “*SAVED*” (*i.e.* falsely reported as being clean).
 - (iii) The unofficial washout testing was carried out in the run up to the most important athletics events (*i.e.* the Olympic Games and the World Championships).
- v. In these circumstances the only appropriate period of ineligibility is the maximum of four years.
- w. The Panel should not interfere lightly with a well-reasoned first instance decision (CAS 2010/A/2283; CAS 2011/A/2518).
- x. There is no reason to interfere with the period of ineligibility in the Challenged Decision. It would have been open to the Sole Arbitrator to disqualify all results from 2012 onwards.

C. Requests for Relief

46. In his Appeal Brief, the Athlete requests the Panel to:

- “(1) Annul the CAS 2018/O/5671 award dated 31 January 2019;*
- (2) Find that Mr Lyukman Adams is not guilty of any anti-doping rule violation under the 2014 IAAF Competition Rules;*
- (3) Declare that no period of ineligibility is imposed on Mr Adams;*
- (4) In the alternative, considerably reduce Mr Adams’ ineligibility period;*
- (5) Declare that none of Mr Adams’ results are disqualified;*
- (6) In the alternative, order the disqualification of Mr Adams’ results to the period 17 July 2012 to 31 July 2013;*
- (7) Order [IAAF] to bear the costs of the arbitration of the first instance arbitration proceedings as well those of the appeal proceedings;*
- (8) Order the [IAAF] to compensate Mr Lyukman Adams for the legal costs and other expenses incurred in the first instance proceedings and these appeal proceedings;*

(9) *Order any other relief that the Panel deems just and proper*".

47. In its Answer, IAAF requests the Panel to rule:

- (i) That the appeal is inadmissible or, in the alternative, that CAS does not have jurisdiction.*
- (ii) On a subsidiary basis and in the event that CAS holds that the appeal is admissible and that it does have jurisdiction, the appeal is dismissed.*
- (iii) The arbitration costs are borne entirely by Mr. Adams.*
- (iv) Mr. Adams shall be ordered to contribute to [IAAF's] legal and other costs*".

V. APPLICABLE LAW

48. Article R58 of the Code provides that:

"The Panel shall decide the dispute according to the applicable regulations and, subsidiarily, to the rules of law chosen by the parties or, in the absence of such a choice, according to the law of the country in which the federation, association or sports-related body which has issued the challenged decision is domiciled or according to the rules of law that the Panel deems appropriate. In the latter case, the Panel shall give reasons for its decision".

49. Rule 21.3 of the 2019 IAAF Anti-Doping Rules, which were in force at the time the Athlete filed his Statement of Appeal in this procedure, states that:

"Any case pending prior to [1 January 2019], or brought after [1 January 2019] but based on an Anti-Doping Rule Violation that occurred before [1 January 2019], shall be governed, with respect to substantive matters, by the predecessor version of the anti-doping rules in force at the time the Anti-Doping Rule Violation occurred and, with respect to procedural matters by (i) for Anti-Doping Rule Violations committed on or after 3 April 2017, these Anti-Doping Rules and (ii) for Anti-Doping Rule Violations committed prior to 3 April 2017, the 2016-2017 IAAF Competition Rules. Notwithstanding the foregoing, ... the relevant tribunal may decide it appropriate to apply the principle of lex mitior in the circumstances of the case".

50. In his Statement of Appeal and Appeal Brief, the Athlete refers to the 2014 version of the IAAF rules in relation to alleged violations of Rule 32.3(b). The IAAF's Answer does not specify which version of the IAAF Rules it relies upon.

51. The Panel notes that the 2012 version of the IAAF Rules (the "2012 IAAF Rules") came into force on 1 November 2011. The 2014 version of the IAAF Rules (the "2014 IAAF Rules") was in force from 1 November 2013 until 31 October 2015.

52. It follows from Rule 21.3 of the 2019 IAAF Anti-Doping Rules that:

- a. In respect of "procedural matters", the 2016 version of the IAAF Rules is applicable (the "2016 IAAF Rules").

- b. In respect of “*substantive matters*”, the 2012 IAAF Rules are applicable for ADRVs that occurred between 1 November 2011 and 31 October 2013; and the 2014 IAAF Rules are applicable for ADRVs that occurred from 1 November 2013 to 31 October 2015.
53. In relation to the procedure to be adopted by the Panel, Rules 42.22 to 42.26 of the 2016 IAAF Rules provide that:
- “22. *All appeals before CAS shall take the form of a re-hearing and the CAS Panel shall be able to substitute its decision for the decision of the relevant tribunal of the Member or the IAAF where it considers the decision of the relevant tribunal of the Member or the IAAF to be erroneous or procedurally unsound. The CAS Panel may in any case add to or increase the Consequences that were imposed in the contested decision.*
 - 23. *In all CAS appeals involving the IAAF, CAS and the CAS Panel shall be bound by the IAAF Constitution, Rules and Regulations (including the Anti-Doping Regulations). In the case of any conflict between the CAS rules currently in force and the IAAF Constitution, Rules and Regulations, the IAAF Constitution, Rules and Regulations shall take precedence.*
 - 24. *In all CAS appeals involving the IAAF, the governing law shall be Monegasque law and the arbitrations shall be conducted in English, unless the parties agree otherwise.*
 - 25. *The CAS Panel may in appropriate cases award a party its costs, or a contribution to its costs, incurred in the CAS appeal.*
 - 26. *The decision of CAS shall be final and binding on all parties, and on all Members, and no right of appeal will lie from the CAS decision. The CAS decision shall have immediate effect and all Members shall take all necessary action to ensure that it is effective”.*
54. Rules 60.24 to 60.25 of the 2016 IAAF Rules state that:
- “24. *In all CAS appeals involving the IAAF, CAS and the CAS Panel shall be bound by the IAAF Constitution, Rules and Regulations. In the case of any conflict between the CAS rules currently in force and the IAAF Constitution, Rules and Regulations, the IAAF Constitution, Rules and Regulations shall take precedence.*
 - 25. *Monegasque law and the arbitrations shall be conducted in English, unless the parties agree otherwise”.*
55. As explained above, in relation to “*substantive matters*”, the alleged ADRVs in this case straddle two versions of the IAAF Rules: the 2012 IAAF Rules and the 2014 IAAF Rules. The Panel has carefully reviewed both versions of the IAAF Rules and concludes that for the purposes of this case, there are no relevant material differences. Where the Panel refers, in this Award, to a rule which appears – in identical form – in the 2012 and 2014 IAAF Rules, the following designation will be adopted: “2012/2014 IAAF Rules”.
56. Under Rule 33.1 of the 2012/2014 IAAF Rules, the burden of proof is on IAAF to establish an ADRV “*to the comfortable satisfaction*” of the Panel “*bearing in mind the seriousness of the allegation*”

which is made". The applicable standard of proof is "greater than a mere balance of probability but less than proof beyond a reasonable doubt".

VI. JURISDICTION OF THE CAS

57. The Panel's jurisdiction to hear this appeal stems from Rules 38.3 and 42 of the 2016 IAAF Rules and Article 47 of the Code.

58. Article R47 of the Code provides that:

"An appeal against the decision of a federation, association or sports-related body may be filed with CAS if the statutes or regulations of the said body so provide or if the parties have concluded a specific arbitration agreement and if the Appellant has exhausted the legal remedies available to it prior to the appeal, in accordance with the statutes or regulations of that body".

59. Rule 38.3 of the 2016 Rules provides that:

"If a hearing is requested by an Athlete, it shall be convened without delay and the hearing completed within two months of the date of notification of the Athlete's request to the Member. Members shall keep the IAAF fully informed as to the status of all cases pending hearing and of all hearing dates as soon as they are fixed. The IAAF shall have the right to attend all hearings as an observer. However, the IAAF's attendance at a hearing, or any other involvement in a case, shall not affect its right to appeal the Member's decision to CAS pursuant to Rule 42. If the Member fails to complete a hearing within two months, or, if having completed a hearing, fails to render a decision within a reasonable time period thereafter, the IAAF may impose a deadline for such event. If in either case the deadline is not met, the IAAF may elect, if the Athlete is an international-level Athlete, to have the case referred directly to a single arbitrator appointed by CAS. The case shall be handled in accordance with CAS rules (those applicable to the appeal arbitration procedure without reference to any time limit for appeal). The hearing shall proceed at the responsibility and expense of the Member and the decision of the single arbitrator shall be subject to appeal to CAS in accordance with Rule 42. A failure by a Member to hold a hearing for an Athlete within two months under this Rule may further result in the imposition of a sanction under Rule 45".

60. As a result of the suspension of RUSAF's membership, the IAAF opted to refer this case to the CAS to be heard at first instance by a Sole Arbitrator. On 31 January 2019, the Sole Arbitrator delivered the Challenged Decision.

61. Rule 42.1 of the 2016 IAAF Rules provides that "all decisions made under these Anti-Doping Rules may be appealed" unless stated otherwise. Rule 42.2 adds that "decisions regarding anti-doping rule violations and consequences may be appealed". Moreover, Rule 42.15 expressly recognises the right of an athlete to file a statement of appeal with the CAS.

62. On the basis of Article R47 of the Code, Rules 38.3 and 42 of the 2016 IAAF Rules, and the common position adopted by the parties, the Panel determines that the CAS has jurisdiction to decide the present appeal.

VII. ADMISSIBILITY

63. Rule 42.15 of the 2016 IAAF Rules provides that:

“Unless stated otherwise in these Rules (or the Doping Review Board determines otherwise in cases where the IAAF is the prospective appellant), the appellant shall have forty-five (45) days in which to file his statement of appeal with CAS, such period starting from the day after the date of receipt of the decision to be appealed (or where the IAAF is the prospective appellant, from the day after the date of receipt of both the decision to be appealed and the complete file relating to the decision, in English or French) or from the day after the last day on which the decision could have been appealed to the national level appeal body in accordance with Rule 42.8(b). Within fifteen days of the deadline for filing the statement of appeal, the appellant shall file his appeal brief with CAS and, within thirty days of receipt of the appeal brief, the respondent shall file his answer with CAS”.

64. The Challenged Decision was rendered on 31 January 2019.

65. The Athlete filed his Statement of Appeal with the CAS on 21 February 2019, within the time limit prescribed by Rule 42.15 of the 2016 IAAF Rules.

66. The Athlete filed his Appeal Brief on 2 April 2019, within the time limit prescribed by Rule 42.15 of the 2016 IAAF Rules.

67. The Panel considers that the Respondent’s argument, based on the non-participation of RUSAF in these proceedings, is properly characterised as a challenge to the admissibility of the appeal.

68. There is no doubt that the Athlete has standing to bring this appeal. Rule 42.5(a) of the 2016 IAAF Rules provides that an International-Level Athlete is entitled to appeal a decision in relation to which he or she is the subject to the CAS. The IAAF’s challenge pertains to the nomination of the respondent(s).

69. It is recalled that Rule 38.3 of the 2016 IAAF Rules expressly recognises that IAAF may, in some circumstances, refer a case directly to CAS for determination at first instance by a Sole Arbitrator. Rule 38.5 of the 2016 IAAF Rules further provides that:

“The Athlete’s hearing shall take place before the relevant tribunal constituted or otherwise authorised by the Member. Where a Member delegates the conduct of a hearing to any body, committee or tribunal (whether within or outside the Member), or where for any other reason, any national body, committee or tribunal outside of the Member is responsible for affording an Athlete his hearing under these Rules, the decision of that body, committee or tribunal shall be deemed, for the purposes of Rule 42, to be the decision of the Member and the word ‘Member’ in such Rule shall be so construed”.

70. The Panel notes that in the Notice of Arbitration at first instance, IAAF asserted that:

“24. The suspension of RUSAF’s membership of the IAAF was confirmed on the occasion of the IAAF Council meeting in Monaco on 26 November 2015. On 17 June 2016, 1 December 2016, 6 February 2017, 2 July 2017 and 31 July 2017, the IAAF Council decided that RUSAF had not met the conditions for reinstatement to membership and the IAAF Congress

maintained the suspension of RUSAF at its meeting on 3 August 2017. On 26 November 2017, and more recently on 6 March 2018, the IAAF Council decided that RUSAF had not met the conditions for reinstatement to membership. The suspension of RUSAF therefore remains in place.

25. *As a consequence of the suspension of its membership, RUSAF was (and is) not in a position to conduct the hearing process of the Athlete's case by way of delegated authority from the IAAF pursuant to Rule 38 of the IAAF Competition Rules.*
26. *Consequently, RUSAF is not in a position to convene (still less to complete) a hearing within the two month time period set out in Rule 38.3 of the 2016 IAAF Competition Rules. In the circumstances – i.e. the impossibility of RUSAF to conduct a hearing process on behalf of the IAAF – it is plainly not necessary for the IAAF to impose any deadline on RUSAF for that purpose.*
27. *In view of the inability of RUSAF to conduct a hearing process within the requisite timeframe and the Athlete's status as an International-Level Athlete, the IAAF is entitled pursuant to Rule 38.3 of the 2016 IAAF Competition Rules to refer the case of the Athlete to the CAS to be heard in the first instance by a Sole Arbitrator...³⁵.*

71. It is on this basis that, on 6 April 2018, the IAAF filed its Request for Arbitration to the CAS against RUSAF (as first respondent) and the Athlete (as second respondent).

72. The IAAF now relies on various CAS decisions, academic commentary and Rule 42.18 of the 2016 IAAF Rules to the effect that: because the Athlete has failed to nominate RUSAF as a respondent in this appeal, it is inadmissible.

73. Rule 42.18 of the 2016 IAAF Rules expressly addresses the question of “*Respondents to the CAS Appeal*” as follows:

“As a general rule, the respondent to a CAS appeal shall be the party which has taken the decision that is subject to appeal. Where the Member has delegated the conduct of a hearing under these Rules to another body, committee or tribunal in accordance with Rule 38.5, the respondent to the CAS appeal against such decision shall be the member”.

74. Two observations may be made in relation to Rule 42.18. First, the opening four words (“*As a general rule*”) are indicative that this provision does not lay down conditions that are mandatory in every case and in all circumstances. Second, the requirement in the second sentence that an appeal must be brought against “*the member*” is expressly limited to circumstances where that member “*has delegated the conduct of a hearing ... in accordance with Rule 38.5*”.

75. It is acknowledged in the Notice of Arbitration at first instance that the IAAF considered itself “*entitled*” to pursue the matter because of the “*impossibility*” of RUSAF conducting a hearing. The Panel determines that the circumstances which led to the IAAF referring the Athlete's case to the CAS cannot properly be described as a ‘delegation’ within the meaning of Rule 38.5.

³ Footnotes omitted.

Moreover, the Panel is not persuaded that the judicial and scholarly authorities upon which IAAF relies are applicable to the circumstances of this case, in particular where RUSAF was plainly not in a position to bring proceedings against the Athlete. The Panel cannot ignore the fact that the IAAF's interpretation of the 2016 IAAF Rules would have the effect of depriving an athlete of the right to appeal merely as a result of a national association ceasing to be a member of the IAAF (for any reason). Such an interpretation is not tenable and does violence to the language of Rules 38.3, 38.5 and 42.18 of the 2016 IAAF Rules. For these reasons, the Panel holds that there is no mandatory rule requiring the Athlete to bring this appeal against RUSAF.

76. Having rejected IAAF's challenge in relation to the nomination of RUSAF as a respondent, the Panel is satisfied, without any doubt, that the present appeal is admissible.

VIII. EVIDENCE OF THE PARTIES

A. Evidence relied on by the Athlete

(a) *Mr. Lyukman Adams (the Athlete)*

(1) *Witness statement*

77. In his witness statement dated 2 April 2019, the Athlete states that he started training at the age of 12. At first, he was active in sprint running and then changed to jumping disciplines. He became a professional athlete in 2005. He has had a successful career, winning 13 medals in triple jump at major World, European and Russian competitions. He has undergone numerous doping tests in Russia and abroad. He has never tested positive.
78. The Athlete states that he was "*shocked and outraged*" when he found out that the IAAF initiated an investigation and charged him with several ADRVs. The accusations contained in the McLaren Reports have caused him "*heavy damage*" and "*hurt my reputation and affected my ability to concentrate and train*". He was also outraged to learn of the accusations that: he was a "*protected athlete*"; he was part of a doping scheme; and that he benefitted from a program whereby his 'dirty' urine samples were automatically reported as negative in the ADAMS system.
79. The Athlete asserts that the accusations against him are "*baseless and wrong*". He was never involved (directly or indirectly) in any doping program and never heard of any doping program directed or controlled by the Ministry of Sport or any other Russian officials. He never used any doping cocktails and has "*no involvement in or knowledge whatsoever of any doping scheme*". The Athlete states that "*I do not know Mr Rodchenkov*" and "*I am not a protected athlete*". He adds that:

"I have never taken any prohibited substances, such as nandrolone, trenbolone, oxandrolone, or metenolone, which I understand are anabolic steroids. Beyond that, I am perfectly aware that the trade of such substances has long been forbidden by Russian criminal law and you would hardly find anyone willing to sell or buy such substances".

80. As to the EDP documents relied on by the IAAF, the Athlete states that *“I do not and could not possibly know why my name appears on these documents”*. There is no information on who compiled the data in EDP documents and for which purpose. He states that in any event, an elevated T/E ratio does not constitute evidence of any wrongdoing because it has always been endogenous in his case. The Athlete adds that: *“I cannot understand on what basis I could be accused of wrongdoing, let alone be disqualified for years”*.

81. The Athlete also states that he has *“never provided any urine sample in non-official containers such as Coke or baby bottles”*. He has never been asked to do so by anyone. The collection of urine samples was conducted strictly in accordance with the applicable anti-doping rules. There is no *“legitimate and sound reason”* for relying on unofficial samples. There is no record of the circumstances in which the non-official samples were allegedly collected. Being part of a washout program makes no sense in light of his personal circumstances from February to July 2013. The Athlete states that he underwent an ankle operation in February 2013 and although he attended training camps in April and May 2013, his ankle was still hurting and his leg could not cope with compression. As a result, the Athlete did not participate in a training camp in June 2013, although he did compete at the Rome Golden Gala on 6 June 2013 where he *“performed very badly”*. Thereafter, he participated at the Russian National Championships in July 2013, finishing third and did not qualify for the World Championships held in Moscow in August 2013. The Athlete states that he had *“absolutely no interest in being part of a doping program in July 2013, as I was recovering from my ankle surgery”*. He tested negative at the Russian National Championships.

(2) *Examination-in-chief*

82. The Athlete gave evidence at the hearing by videoconference, assisted by a translator. Upon questioning by his counsel, the Athlete confirmed the content of his witness statement and reiterated that he has never taken any prohibited substances, nor given urine outside an official doping test or by way of an unofficial sample. The Athlete said he had never met Dr. Rodchenkov. He added that he was surprised about the allegations against him because *“I don’t think that there is any kind of a system that exists in Russian sport. Everyone acts on their own...”*.

(3) *Cross-examination*

83. Counsel for IAAF did not put any questions to Athlete, clarifying that: *“it does not mean that his denials have been accepted by [the IAAF], but simply, we have asked questions of him before, that testimony is on record and I have no further questions for Mr. Adams”*.

(4) *Evidence at first instance*

84. The testimony of the Athlete’s oral evidence at first instance is part of the record in this appeal. When questioned by his counsel at first instance, the Athlete said that he heard about Dr. Rodchenkov in 2009, when Dr. Rodchenkov spoke to his coach *“about ... my high level of testosterone”*. The Athlete added that Dr. Rodchenkov *“told my coach that doping was found in my blood and that for a certain amount of money, he could solve this problem, so that I would not be disqualified”*. The Athlete stated that no prohibited substances were found in any of his samples at the time. He

asserted that Dr. Rodchenkov “*wanted to cheat my coach, because I have a naturally high level of testosterone in my blood*”. When asked by the Sole Arbitrator why he said in his witness statement that “*I have never heard of Mr Rodchenkov until November 2015*”, the Athlete responded by saying: “*I think this was a translation problem*”. Upon further questioning, the Athlete added that: “*in 2009, I found out who it was and then I forgot about this person*”. When asked by counsel for the IAAF whether he believed the allegations of Prof. McLaren, the Athlete said that he “*could partially agree with his report*”. Asked which parts, he said: “*those parts that resulted eventually in several athletes being disqualified for doping*”.

(b) Mr. Manuel Rundt

(1) Expert report

85. Mr. Rundt is an IT forensics and security expert. He is the author of an expert report dated 1 April 2019, submitted by the Appellant. Mr. Rundt and the IAAF’s IT expert (Mr. Sheldon) were both given access to the same 35 EDP documents for analysis, comprising 11 emails and 24 Microsoft Office files.
86. In his report, Mr. Rundt sets out three core principles which, according to him, constitute the “*main forensic best practices*”. These are:
 - a. “*Authenticity of evidence can only be established by a complete and gapless chain of custody and a strong documentation of the evidence preservation/ collection process*”⁴.
 - b. Digital evidence must be preserved without any alterations or loss of information. This is done by creating “*so called forensic images of the original evidence and by a write-blocking software, by creating hash values of the original evidence and by a thorough documentation that prove the forensic soundness of the evidence collection and handling process by the forensic experts*”⁵. This allows evidence to be authenticated so that it may be “*traced back to the original pristine data and dated back to that moment in time*”.
 - c. Any alteration “*might render it useless and cast doubts on the evidence*”. All alterations must be properly documented and explained.
87. Mr. Rundt states that the most important principle is “*a complete and gapless chain of custody*”. Proof of authenticity can be carried out by “*comparing the hash values of the evidence received to the hash values of the original evidence*”. If the hash values are the same as the original evidence, it can be proved that the evidence has not been tampered with and no alterations have been made. External metadata can be edited or removed with very rudimentary knowledge of IT. In general, internal metadata will only be updated if a document is saved after modification. The internal metadata timestamps of Microsoft Office documents “*can be forged very easily without leaving any forensic traces*”. This can be as easy as setting back the clock in a computer system, resulting in falsified timestamps. This type of modification would leave “*absolutely no detectable traces within the internal*

⁴ Footnote omitted.

⁵ Footnote omitted.

metadata of the office document itself and will be indistinguishable from any genuine document” and the only proof of manipulation would be found on the computer itself, not in the office document file. If provided only with an internal metadata timestamp, with nothing else to correlate it to, “one simply cannot make any forensically sound assumptions on the validity of this timestamp and of the authenticity of the document”.

88. In his report, Mr. Rundt states that verifying the authenticity of EDP documents would require linking back to the first forensic evidence preservation of the original device containing the documents. This is usually done by comparing hash values. *“If the hash value of the exported document matches the original document (i.e. the document as preserved during the first forensic evidence preservation), you can be highly certain that the evidence has not been tampered with in the meantime”*⁶. Authenticity in a forensic sense only means that it is an original copy of the evidence as initially preserved and has not been manipulated since first preservation; it does not mean that the document itself is genuine, or that its content is true.
89. Mr. Rundt conducted an analysis of 35 EDP documents. He notes that he was not provided with a forensic image of the original digital evidence, *“only a zip file containing a bundle of loose files ...”*. He also states that he did not receive *“any lists with hash values for the EDP documents relating to the original digital evidence”* or *“any documentation regarding the digital evidence preservation process, the forensic processing or the chain of custody for any part of the digital evidence”*. Mr. Rundt states that, as a result, he did not have the data necessary to establish the authenticity of the EDP documents and that *“[n]o forensic expert can make any valid assessment on the creation dates and the authenticity of these documents”*. Any assumptions in relation to these matters would be *“forensically unsound and misleading”*.
90. Mr. Rundt states that of the 24 (non-email) EDP documents he analysed, 9 have a *“modified”* timestamp in the file system of 9 April 2016, between 17:20:48 and 17:29:33 UTC (coordinated universal time). Twenty documents had a *“created”* timestamp in the file system of 9 November 2016, between 16:43:08 UTC to 16:43:10 UTC. According to Mr. Rundt, this is indicative that the documents may have been *“extracted by someone or some (forensic) process”* on 9 April 2016 and were then *“copied over to another directory or drive”* on 9 November 2016. This would explain why some of the *“created”* timestamps are dated after the *“modified”* timestamp in the file system. This means that the evidence was not handled in a *“forensically sound manner”* because the original file system timestamps were not preserved during the process and replaced with timestamps dated 9 April 2016. In addition, the copying process on 9 November 2016 was *“forensically not sound”* because it destroyed the original *“created”* timestamps in the file system and replaced them with the time of the copy process. Mr. Rundt concludes that:

“Therefore we can conclude that the evidence presented to us has not been handled in a forensically sound manner. This also means that the authenticity of the evidence cannot be established by means of a timestamp analysis, as crucial forensic evidence has been destroyed due to the improper handling of the evidence ... These inconsistencies in the timestamps have severe forensic implications and make it virtually impossible to make any assessment on the creation dates or the authenticity of the documents”.

⁶ Footnote omitted.

91. In relation to the 11 emails analysed by Mr. Rundt (which includes the Emails relied on by the IAAF in this case), he states that:

“... there are some emails supposedly from Tim Sobolevsky that do not contain any transportation headers, except for the primary ‘received’ header that claims that this message was received via HTTP by the Gmail server or that they were delivered by EMSTP. All 11 email messages contain either headers that state the mail was delivered to Tim Sobolevsky’s inbox or the ‘received’ headers show that the last hop was always a Google mail server. Had they been extracted from the mailbox of Dr. Grigory Rodchenkov at Yandex, they would show multiple ‘received’ headers including the received headers of yandex.ru, where Dr. Grigory Rodchenkov’s mailbox is located. It is therefore unclear how those messages came into the possession of Dr. Grigory Rodchenkov. This issue has not been addressed and explained to us. This information is crucial for the assessment of the authenticity of those emails. Since emails can be forged easily, the emails’ source and the documentation of the forensic evidence preservation process regarding these emails is essential for their evidentiary value”.

92. Mr. Rundt’s report concludes by noting that:

“As there is no explanation on where the documents and emails came from and how they got there, all the documents provided must be considered as questionable. No forensic sound conclusion as to their authenticity can be made”. The digital evidence “cannot be traced back to the original evidence or to a pristine evidence preservation” and “does not meet the standards set out by the forensic best practices established within the IT forensic community”.

(2) *Examination-in-chief*

93. Mr. Rundt gave oral evidence at the hearing by videoconference. During examination-in-chief, he reiterated that the core principles of forensic best practices *“have not been complied with at all”* in relation to the EDP documents he examined.

(3) *Cross-examination*

94. In response to questions by counsel for the IAAF, Mr. Rundt stated that he had not found any specific evidence of manipulation, forgery or fabrication in any of the emails he analysed, including in the *“hops”* and DKIM signatures, but he *“could not rule out if they had been forged”* because he did not have enough information. Asked about Mr. Sheldon’s DKIM validation process, Mr. Rundt said he had also checked the DKIM signatures, but only four of the 11 emails he was provided with had a DKIM signature (EDP0148, EDP0278, EDP0279 and EDP0434). In relation to those four emails, Mr. Rundt stated that:

“... it is quite highly probable that they were actually sent on the day that they claim to be sent because a DKIM signature means that the server, of Google for example, would actually sign the message, which also includes a timestamp of the message when it was sent. So you can say OK this message has really been sent on the timestamp it says it has been sent by the Google main server. But again this doesn’t give you any information if the content is true or not...”.

95. When asked to comment on Mr. Sheldon’s analysis of the EDP documents, Mr. Rundt stated:

“... Mr Sheldon always claimed that the creation date was reflected by the internal metadata, which I think we can show does not hold [inaudible]. Also he said in his first report that many of the files were copied from each other and they were modified, that they all had exactly the same creation date. So also I cannot really say this is true because it does not really make sense, because no one will create, let's say 20 versions of the file on the very same second and then use each one of them consecutively to actually make a new version of it. So normally you would just open the file, save it as, or make a file system copy and then you have a new version, which will still have the same internal metadata timestamp, but it is not the timestamp of that version when it was created because it happened later”.

96. Counsel for the IAAF asked Mr. Rundt whether he could say that a document was created in 2012 if it had been attached to a real email sent in 2012. Mr. Rundt broadly agreed with this proposition, provided the document was attached to an email with a DKIM signature. Mr. Rundt was also asked about the process of backdating documents; he said that it would probably be possible to create an automated system to do this. He clarified that he could not say whether this had happened or not, he simply did not have enough information and therefore could not rule it out.

(c) Prof. Michael Graham

(1) Expert report

97. Prof. Graham describes himself as a chartered forensic scientist and states that he has contributed to national and international research as well as making representations in medico-legal court cases involving the use of anabolic-androgenic steroids. He produced an expert report dated 2 April 2019 which was submitted by the Athlete.
98. Prof. Graham's report states that anabolic-androgenic steroids (“AAS”) are *“a group of synthetic compounds similar in chemical composition to the natural anabolic steroid testosterone”*. He states that all the anabolic-androgenic steroids listed in the Athlete's *“alleged doping schedules”* have been prohibited in sport since 2004. Prof. Graham also states that he cannot comment on whether the testing referred to in the Washout Schedules was *“conducted in a sound way, from a scientific perspective”*.
99. In relation to washout rates indicated in the schedules, and by reference to the elimination half-life of the relevant substances, Prof. Graham states that:

“The London Washout Schedules contain several elements that are scientifically not credible. First, it is not scientifically credible for Desoxymethyltestosterone levels to reduce at the pace indicated in the Schedules. Second, if Mr Adams had a naturally elevated endogenous T/E ratio as this seems to emerge from the documents made available to me, such T/E ratio would have remained high and not reduced so drastically in a few days. Further, assuming Mr Adams had been doping as the IAAF alleges, in view of the detection window of the prohibited substances allegedly taken by Mr Adams in July 2012, metabolites of Desoxymethyltestosterone should have been found when he was tested during the Olympic Games in London. Mr Adams tested negative. Taken alone or together, these elements confirm in my view the scientifically unreliable character of the London Washout Schedules.

Similarly, the Moscow Washout Schedule contains information which is scientifically not credible either. First, the washout pace of nandrolone, trenbolone, oxandrolone and methenolone indicated in the Schedule is scientifically not credible. Second, a T/E ratio of 15 cannot reduce from 15 to 9 in 11 days and then to 6 in another 8 days. Further, Mr Adams underwent a doping test on 24 July 2013 (sample 2810807), which came out negative. In view of the detection window of the prohibited substances allegedly taken by Mr Adams in 2013, it is not scientifically credible that no traces of AAS were found during this test, if he was loaded with the AAS indicated in the Moscow Washout Schedule. Taken alone or together, these elements confirm in my view the scientifically unreliable character of the London Washout Schedules”.

100. Specifically in relation to the London Washout Schedules (EDP0019, EDP0021 and EDP0024), Prof. Graham states that: *“it is not scientifically credible for Desoxymethyltestosterone levels to reduce from ‘460,000’ units (46 ng/ml) to ‘40,000’ units (4 ng/ml) in just 5 days and for the T/E ratio to remain at 10 and then for the Desoxymethyltestosterone levels to reduce to undetectable in a further 6 days and for the T/E ratio to be 6”.*

101. As to the Moscow Washout Schedules (EDP0028), Professor Graham states that it is *“scientifically not credible”* that an individual with a urinary concentration of nandrolone of 20 ng/ml on 6 July 2013 would then be clear of nandrolone on 17 July 2013 *“because it would take a minimum of 33 days post single administration of 50 mg, for the metabolites to be washed out of the system”*⁷.

(2) *Examination-in-chief*

102. Prof. Graham gave live oral evidence at the hearing by videoconference. At the outset, he corrected some matters in his CV and made the following correction in relation to his report:

“When I was preparing my report, I believed that the first entry in the schedule correlated with the last ingestion of the alleged prohibited substances that were reported in the schedules, both London and Moscow washout. So I believed that the first entry was the last ingestion and based my report totally on that, believing that if there was an allegation of a systematic State doping, that there would be a systematic assessment of (inaudible) prohibited substances in athletes’ urine.

103. When asked by counsel for the Athlete what consequence this assumption might have on the results in his report, Prof. Graham stated that the *“results did not seem to correspond or correlate with potential washouts of prohibited substances and did not seem to follow normal pharmacokinetic decay or pharmacodynamics effects of prohibited substance on the body, or the body on the substance”.*

104. As to the washout rates contained in his report, Prof. Graham stated that:

“I must confess that my original assumption that, for example trenbolone, I wasn’t aware that that was available as an oral ingestion product and my report made reference that the excretion rate of that was, for example, a very long period of time, correspondingly nandrolone is exactly the same, whereas when I reviewed the literature, I found that both trenbolone and particularly nandrolone ... and I actually agree

⁷ Underlining in the original.

with Professor Ayotte that the nandrolone sulphate, which is an oral product, would have been eliminated from the system a lot quicker than if it was taken intramuscularly”.

105. Prof. Graham agreed with counsel for the Athlete that in the absence of information in the Washout Schedules, *“virtually any scenario could be considered plausible if you assume that ... the form of administration, the frequency, the dose is not clear... if you adjust all of these factors”.*

(3) *Cross-examination*

106. During cross-examination by counsel for the IAAF, Prof. Graham acknowledged that he did not have any *“operational analytical anti-doping experience within an anti-doping laboratory”.*

B. Evidence relied on by the IAAF

(a) Dr. Grigory Rodchenkov

(1) *Witness statement*

107. Dr. Rodchenkov produced a witness statement dated 23 August 2018. Therein, he states that he is the former Director of the Moscow Anti-Doping Centre in Russia. He resigned in November 2015. Dr. Rodchenkov states that he assisted Prof. McLaren during his investigation into allegations of institutional doping in Russia and that he believes his life is at risk as a result.

108. Dr. Rodchenkov describes the background to *“the Program”*. Before the 2005 IAAF World Championships he recalls misreporting approximately 100 positive samples in athletics. He states that there was *widespread* use of doping in athletics and describes the Disappearing Positive Methodology, which involves hiding positive samples and making false entries into ADAMS. He also describes washout testing, carried out in advance of the 2012 London Olympic Games and the 2013 Moscow World Championships.

109. As to the London Washout Schedules, Dr Rodchenkov states that:

“On 17 July 2012, I left for the 2012 London Olympic Games, and Dr. Tim Sobolevsky took over the washout testing program and started drafting the washout tables (London Washout Tables). He would provide the London Washout Tables to the Liaison who reported to Deputy Minister Nagornykh...”

The London Washout Tables recorded the prohibited substances that had been detected in the relevant samples (if any). Often, the London Washout Tables also refer to numbers next to the prohibited substance. The numbers reflect the peak height, which provides an approximate estimation of the concentration of the relevant substance (or metabolite). For example, 60,000 means that the concentration is around 6 ng/ml.

I have reviewed the documents at EDP0019 to EDP0027 ... and can confirm that these are the London Washout Schedules that were produced by the experts from Moscow Laboratory in the lead-up to the London Olympic Games”.

110. In relation to the Moscow Washout Schedules, Dr Rodchenkov states that:

“Unlike the tables created for the 2012 Olympic Games, on the 2013 Moscow Washout Tables, the names of the relevant athletes were identified on documents entitled ... These documents (Moscow Washout Tables) were updated to reflect the progress of the washout testing.

It was my understanding that the athletes in the washout-program were instructed to take the Duchess Cocktail (composed of trenbolone, methenolone and oxandrolone). However, many of them used other doping protocols...

(...)

I have reviewed the documents at EDP0028 to EDP0038 ... and can confirm that these are the Moscow Washout Schedules that Dr. Sobolevsky created in the lead-up to the Moscow World Championships”⁸.

111. Specifically in relation to the Appellant, Dr Rodchenkov states that the Athlete *“benefitted from the Program”* and was *“engaged in doping over the course of years”*.

(2) *Examination-in-chief*

112. Dr. Rodchenkov gave live oral evidence at the hearing by videoconference from behind a screen, assisted by a translator and in the presence of a legal representative. Dr. Rodchenkov said that *“grodcchen@yandex.ru”* was his email address during the relevant period.

113. Dr. Rodchenkov stated that he discussed the use of anabolic steroids with the Athlete’s coach on various occasions in 2012 and 2013. When asked by the President of the Panel why this was not included in his witness statement, Dr. Rodchenkov said that his statement was limited to the *“general informational about the state of athletics in Russia, mainly in relation to the concealing of samples etc”*.

(3) *Cross-examination*

114. During cross-examination by counsel for the Athlete, Dr. Rodchenkov stated that he did not prepare the London Washout Schedules. He was at the London Olympic Games from 17 July 2012 and therefore not conducting any tests in Moscow at that time. Dr. Rodchenkov said that in his absence, the analysis was conducted by laboratory staff, first and foremost his deputy, Dr. Sobolevsky.

115. Dr. Rodchenkov stated that Dr. Sobolevsky prepared the first version of the Moscow Washout Schedules in an Excel spreadsheet. Dr Rodchenkov said that he took that data, consolidated it into a table, added some colouring, and prepared the final version. Specifically in relation to EDP0028, he stated that: *“I only have my version of this document, this particular version is not found on*

⁸ Footnote omitted.

my computer...”. Asked about discrepancies in different versions of the Washout Schedules, Dr. Rodchenkov stated: *“we don’t know the exact concentration because we didn’t have a standard”*.

116. Asked about the Athlete, Dr. Rodchenkov stated that he never met him personally and never gave him any prohibited substances. Dr. Rodchenkov said he never saw the Athlete take a prohibited substance, or give a sample outside an official test.
117. Dr. Rodchenkov refused to answer a question relating to his earnings from a 2017 documentary. In answer to a question from the President of the Panel, Dr. Rodchenkov stated that he was not being paid to give evidence in these proceedings.

(b) Mr. Andrew Sheldon

(1) Expert report

118. Mr. Sheldon is a computer forensic consultant specialising in the detection of computer crime, digital piracy, fraud and abuse in computer systems. He produced an expert report dated 31 October 2018, which was submitted by the IAAF. As explained above, Mr. Sheldon examined the same 35 EDP documents as Mr. Rundt.
119. Specifically in relation to the 11 emails he examined, Mr. Sheldon concludes that the *“messages are authentic and have been sent and received between Gmail, Yandex, minstm.gov.ru and Rusada accounts and there are no signs of changes to the Internet Transport headers”*. Mr. Sheldon states that he was able to calculate *“an MD5 hash value for every email and document”* contained in the forensic images he received.
120. In relation to DKIM signatures, Mr. Sheldon’s report states that:

“A DKIM signature is a unique object generated using a strong hashing algorithm (SHA256) to create a hash of the message body which is added to a hash of multiple fields found in the email header such as From, To, In-Reply-To, References, Subject, Date.

These fields are used together with the public key provided by the email senders domain to generate a unique signature for every mail leaving that domain.

(...)

If any element, even a comma, is changed in the email, including its content, the DKIM signature will not be the same. Therefore, if any amendment has been made to the emails I examined, the DKIM will not have passed.

I have run re-validation tests on all the emails with DKIM signatures with the relevant algorithm (SHA256) using the public cryptographic key of the sending domain (ie. Google.com) and for all of them the DKIM-result was pass indicating that the native files I examined have not been altered since they were sent on the dates indicated”.

⁹ Footnote omitted.

121. Mr. Sheldon makes the following observations in relation to Email 1 (EDP1182):

“This message was sent from a Gmail account and the headers contain the appropriate Gmail authentication indicating a genuine email

The headers indicate that the message was created and submitted to the Gmail system.

The date and time stamps are the same as the date and time encoded (epoch date) into the Message-Id header (Friday, October 19, 2012 11:09:33 AM UTC)

The email was created on the date and time shown and the headers are legitimate and show no irregularities in timing

The originating IP address is shown as 62.173.134.98 which is currently associated with ‘Internet-Cosmos Ltd, Nijnyaya Krasnoselskaya str. 39, 105066 Moscow, Russia’”.

122. Mr. Sheldon makes the following observations in relation to Email 2 (EDP0276):

“This message was sent from a Gmail account using HTTP

The headers indicate that the message was created and submitted to the Gmail system

The message-ID indicates a genuine message that has been submitted to the Gmail system.

The email was created on the date and time shown and the headers are legitimate and show no irregularities in timing”.

123. Emails 1 and 2 have no DKIM signature.

124. Mr. Sheldon makes the following observations in relation to Email 3 (EDP0278):

“This message was sent from a Gmail account using HTTP

The headers indicate that the message was created and submitted to the Gmail system

The message-ID indicates a genuine message that has been submitted to the Gmail system.

The email was created on the date and time shown and the headers are legitimate and show no irregularities in timing

This email has been opened and replied to. The response can be seen in EDP0279. This fact is established by referencing the unique Message-Id header field.

When a message is sent in reply to an email, the original email ‘Message-Id’ is copied into a new header field called ‘In-Reply-To’. In EDP0279, the In-Reply-To field is as follows:

In-Reply-To

<CAHOLiRPhJipY7pcbzrqtnGfKTumCe1UTadJcV4mqQE_QBZv_7+A@mail.gmail.com>

This is the same ‘Message-Id’ value as shown in EDP0278”.

125. Email 3 has a DKIM signature.

126. Mr. Sheldon makes the following observations in relation to Email 4 (EDP0279):

“This message was sent from a YANDEX .RU account using HTTP and the headers contain the appropriate transport sequence authentication.

The dates and times applied to the headers by each server are in line with those expected with a mail travelling from an external (Yandex) system to the Gmail systems

The email was created on the date and time shown and the headers are legitimate and show no irregularities in timing

The originating IP address is shown as 178.34.134.34 which is currently associated with ‘OJSC Rostelecom, Krasnaya Polyana, Krasnodarskiy kray, Russian Federation, 354392’.

This message is in reply to EDP0278

When a message is sent in reply to an email, the original email ‘Message-Id’ is copied into a new header field called ‘In-Reply-To’. In EDP0278, the Message-Id field is as follows:

Message-id

<CAHOLiRPhJipY7pcbzrqtnGfKTumCe1UTadJcV4mqqEQBZv_7+A@mail.gmail.com>

This is the same ‘Message-Id’ value as shown in the ‘In-Reply-To’ field of this email”.

127. Mr. Sheldon’s report states that Email 4 has the following DKIM signature:

```
v=1; a=rsa-sha256; c=relaxed/relaxed; d=yandex.ru; s=mail; t=1393858512;  
bb=z/D/WORZsMubSrppfNO6sC5Xf6n11EDWZadaictBm0s=; b=From:To:In-Reply-  
To:References:Subject:Date;  
b=C6EnKQcwX/ZDi9db9gRjAWxKROm9OBYXbDbYjPLdy/mReXIR/mgXfhpXArct  
IRSz0+tf0BGkk6SeG2Sy2aUWQbV+O8ofHYLns8cbdBg1eKznU8x0wO2LgQMkjSa4d  
ei8SLF LUNXxSU1gLi6tOeA6v+vY3DwCWVwtMd4nNlb0k4I=
```

128. Mr. Sheldon makes the following observations in relation to Email 5 (EDP0432):

“This message was sent from a Gmail account using HTTP

The headers indicate that the message was created and submitted to the Gmail system

The date and time stamps are the same as the date and time encoded (epoch date) into the Message-Id header (Tuesday, July 22, 2014 10:47:26 AM UTC)

The email was created on the date and time shown and the headers are legitimate and show no irregularities in timing

The originating IP address is shown as 85.93.156.110 which is currently associated with ‘Internet-Cosmos Ltd, Nijnyaya Krasnoselskaya str. 39, 105066 Moscow, Russia”.

129. Email 5 has no DKIM signature.

130. Mr. Sheldon makes the following observations in relation to Email 6 (EDP0434):

“This message was sent from a Gmail account using HTTP

The headers indicate that the message was created and submitted to the Gmail system

The message-ID indicates a genuine message that has been submitted to the Gmail system.

The email was created on the date and time shown and the headers are legitimate and show no irregularities in timing”

131. Email 6 has a DKIM signature.

132. Upon examination of the internal file metadata and filesystem metadata, Mr. Sheldon makes the following observations in relation to the London Washout Schedules (EDP0019, EDP0021 and EDP0024) and the Moscow Washout Schedules (EDP0028):

EDP0019

“The File system metadata indicates the file was modified in April 2016 and created & accessed in November 2016. This would be the case if the file was;

- 1. Opened and Saved As a new file to a new location in April 2016 o All dates would be set to 09/04/2016*
- 2. Copied to a new location in Nov 2016o The Modified date is preserved, Created date is updated to 09/11/16*

However, as the internal metadata CREATION, LAST PRINTED and MODIFICATION dates are all earlier than the dates shown in the filesystem metadata I can conclude it was created on 19th July 2012 at 04:02:29 UTC”.

EDP0021

“The Filesystem metadata indicates the file was modified in April 2016 and created & accessed in November 2016. This would be the case if the file was;

- 1. Opened and Saved As a new file to a new location in April 2016 o All dates would be set to 09/04/2016*
- 2. Copied to a new location in Nov 2016o The Modified date is preserved, Created date is updated to 09/11/16*

However, as the internal metadata CREATION and MODIFICATION dates are all earlier than the dates shown in the filesystem metadata I can conclude it was created on 23rd July 2012 at 06:13:53 UTC”.

EDP0024

“The File system metadata indicates the file was modified in April 2016 and created & accessed in November 2016. This would be the case if the file was;

- 1. Opened and Saved As a new file to a new location in April 2016 o All dates would be set to 09/04/2016*
- 2. Copied to a new location in Nov 2016o The Modified date is preserved, Created date is updated to 09/11/16*

However, as the internal metadata CREATION, LAST PRINTED and MODIFICATION dates are all earlier than the dates shown in the filesystem metadata I can conclude it was created on 28th July 2012 at 13:48:29 UTC”.

EDP0028

“The Filesystem metadata indicates the file was modified in August 2013 and created & accessed in November 2016. This would be the case if the file was;

1. *Opened and Saved As a new file to a new location in August 2013*
 - *All dates would be set to 21/08/2013*
2. *Copied to a new location in Nov 2016*
 - *The Modified date is preserved, Created date is updated to 09/11/16*

However, as the internal metadata CREATION date is earlier than the dates shown in the filesystem metadata I can conclude it was created on 4th July 2013 at 11:58:04 UTC

The file was last printed on the 30th July 2013

Because the MODIFIED date in document metadata matches the MODIFIED date in the file system metadata, I can conclude that the document was subsequently modified and saved to a different name and/ or location on the 21st August 2013 at 05:38:14 UTC

However, the file name indicates this file is a recovery of an ‘Autosaved’ version of the file named Tim_Nag_01Aug2013.xlsh. The Autosave function of Excel creates regular copies of open spreadsheets (providing at least one change has been made) and includes the word ‘Autosaved’ in the filename with a unique number. The default time for auto-save in Excel is 10 minutes. If changes had been saved to the file while it was open, the autosave version would include revision history in the internal metadata. No such revision history is present indicating that no saved changes to the content had been made.

This file has exactly the same creation date as EDP0029 to EDP0038 but a different HASH value. And was modified AFTER EDP0038. This indicates that this file is a modified copy of EDP0035 (the earliest in the sequence) or EDP0030, EDP0031, EDP0033, EDP0034, EDP0036, EDP0037 or EDP0038 with different content.

The document Author and Last Saved By metadata fields are populated using the names registered in software used to create or modify the document. In this case, the software used was MS Excel version 2010”.

133. Finally, specifically in relation to EDP0019, Mr. Sheldon states that it has an identical “creation” and “last printed” date and time as two other documents: EDP1168 and 1170. By examining the contents of these files, Mr. Sheldon deduces that “they all derive from the same document which I believe to be a previous version of EDP0019” which was created on 19 July 2012 at 04:02:29. Mr. Sheldon’s report sets out, in some detail, what he believes to be the sequence of events that led to the creation of these three documents.

(2) *Examination-in-chief*

134. Mr. Sheldon gave oral evidence at the hearing by videoconference. Asked by counsel for the IAAF about the evidence of Mr. Rundt, Mr. Sheldon accepted that it would be possible to change the internal metadata of a document by setting back the clock in a computer system. However, he added that *“in isolation”* this *“might create a document that would pass scrutiny, but in corroboration with the email header, we have a third party, in this case, Gmail, Google, that is saying this document was attached to this email that was sent on this date and time, so the date and time encoded in the message-ID is adding confidence that the document was also created or sent at that time”*.
135. Mr. Sheldon was asked specifically about Email 4 (EDP0279). He described in detail the information contained in the header and the various *“hops”* which can be seen on page 27 of his report as follows:

| Hop | Sent From | Received By | Sent Using | Sent Time | Hop Delay |
|-----|--|--|------------|------------------------------|-----------|
| 1 | [178.34.134.34] ([178.34.134.34]) | web25h.yandex.ru | HTTP | 03/03/2014 18:55:12 +0400 | * |
| 2 | 127.0.0.1 (localhost [127.0.0.1]) | web25h.yandex.ru (Yandex) | ESMTP | 03/03/2014 18:55:12 +0400 | 0 |
| 3 | web25h.yandex.ru (web25h.yandex.ru [84.201.187.159]) | forward5h.mail.yan dex.net (Yandex) | ESMTP | 03/03/2014 18:55:13 +0400 | 1 sec |
| 4 | forward5h.mail.yandex.net (forward5h.mail.yandex.net. [2a02:6b8:0:f05::5]) | mx.google.com | ESMTPS | 03/03/2014 06:55:21 -0800 | 8 sec |
| 5 | | 10.60.179.12 | SMTP | 03/03/2014 06:55:21 -0800 | 1 sec |

136. In relation to Email 4, and by reference to the table above, Mr. Sheldon explained that:

“When a user sends an email, it leaves their computer and it travels across the internet, or across the network and arrives at the receiver’s mailbox. The route it takes goes through multiple computers, or multiple servers. At each step, we call it a ‘hop’, but at each step the receiving server or servers are adding information to the header of the email saying where it has come from and where it is going to. On page 27 of my report we have got some steps. They are a summary of the steps, the important parts. And they are actually in reverse order. So at the top, hop 1, that is the sender’s first step. So the first step, we left the computer and arrived at a server which is named ‘web25h.yandex.ru’. And the IP address, where it says ‘Sent From’, that is the IP address of that server. So the domain is ‘yandex.ru’ and inside the ‘yandex.ru’ domain is a physical box which they have named ‘web25h’ and they have given IP address 178.34.134.34. It has been sent and gets to the next hop, which is internal to the yandex domain, and then it goes to the next hop which is a different server, or it goes to a forwarding server called ‘forward5h.mail.yandex.net’ and then at the next hop, you can see it is sent from ‘forward5h’ and received by ‘mx.google’. And then in the last step what we see is the server, the Google server, that 10.60.179.12

is a Google box, or Gmail box, in which that message passed. So that's the 'hops'. Each step, the server has added date, time and identity if you like ...".

137. In relation to the DKIM signature of Email 4, Mr. Sheldon stated that:

"It is a very complex structure ... the sender's domain has a public key and a private key. When I send an email, it goes to my sending server and my sending server uses a special thing called a hash calculator ... it takes various components of the email. And in this particular case, we can see it is using the 'sha256' hash number and it is using the 't=', there is a number there, that is actually ... encoded date and time. Then in the next line ... it says 'h=' and that is the header and it is using a combination from the contents of the 'From' field, the 'To' field, the 'In-Reply-To' field, the 'References' field, the 'Subject' field and the 'Date'. It is taking all the contents of all those things and calculating a unique hash value for them and then it is taking the contents of the body, including any attachments, and creating a hash value of those. And it takes all those hash values, creates a new hash value and signs that message using its private key. When the receiving email server receives this message, it can read this DKIM signature ... and it can use the public key of the sending domain to check that it is an authentic email and hasn't been modified during transmission. So in essence DKIM is a method for the receiving server to check that the sending server has sent correct information and that it hasn't been manipulated or modified. Of significance, it means that once you receive the email, you can check the contents of the email against the internet, against these key servers, to determine whether the contents have been modified. And that's the test I did. So the contents of this email, the date and time, are correct, the sender's 'to' and 'from' are correct, and the body, including the attachments have not been modified".

138. Mr. Sheldon stated if you change "any dot or comma" in an email, the DKIM signature validation would not pass. Of the 11 emails he analysed, four had a DKIM signature and all four successfully passed DKIM validation (including Email 3, Email 4 and Email 6).

(3) *Cross-examination*

139. During questioning by counsel for the Athlete, Mr. Sheldon accepted that he only had access to copies of the 35 files he examined, not the original files. He did not have access to the hard-drive(s) or computer(s) from which the files originated. He did not know how or from which device(s) the data was extracted. He was not present when the data was extracted and did not know whether any other expert was present. He did not have access to documents pertaining to the chain of custody of the EDP documents. He did not know how the documents had been stored, or who had been given access to them. Finally, Mr. Sheldon said that he could not speak to whether the information contained in the documents is accurate or identify "the person behind the keyboard", but he could say whether they had been manipulated and whether the emails were genuine. In his analysis, he found no evidence that the documents had been "tampered with" or that the emails had been "faked".

140. Asked by a Panel member why some of the emails do not have a DKIM signature, Mr. Sheldon explained that these emails may have been retrieved from the sender's mailbox and as a result, these emails "haven't yet gone through the system".

(c) **Prof. Christiane Ayotte**

(1) *Expert Report*

141. Prof. Ayotte is the Scientific Director of the WADA-accredited Doping Control Laboratory at the Armand-Frappier Santé Biotechnologie Research Centre in Quebec, Canada. As to her experience, she states that: *“I have significant experience of the detection and identification of prohibited anabolic agents in athletes’ samples and I have conducted research on the designer black market steroids that are discussed in these cases, namely desoxymethyltestosterone and methasterone”*¹⁰. Prof. Ayotte prepared an expert report dated 23 May 2019, which was submitted by the IAAF.
142. In her report, Prof. Ayotte states that she *“firmly disagree[s] with Prof. Graham’s conclusions as well as the underlying assumptions and premises”*. Prof. Ayotte makes a number of general observations in relation to Prof. Graham’s report, including:
- a. The level of metabolites detected cannot be estimated with any useful certainty because reference standards of metabolites were not available in 2012 and 2013. Dr. Rodchenkov adopted *“some equivalence”* but *“that should not be regarded as anything other an imprecise approximation”*.
 - b. The specific gravity value of athletes’ samples in the Moscow Washout Schedules is not available. It is therefore *“very difficult to understand how the expert can draw conclusions as to the scientific plausibility of an excretion curve built from peak heights – in particular using terms like ‘impossible’ – without having adequate data as to the specific gravity”*.
 - c. Prof. Graham appears to assume that the detection window is a fixed parameter that is the same for every person in every circumstance. However, there is *“significant inter-individual variability in excretion”*.
 - d. There is no data on the doping regimen, including the dose, mode of ingestion, repetition or the timing. Prof. Graham *“appears to assume that the date of the first positive sample (in a series of positives) in the washout tables must be the last day of administration; however, there is no apparent basis for this assumption”*.
 - e. Prof. Graham argues that if athletes had been taking anabolic-androgenic steroids, the T/E values of their urine samples *“would have been augmented”*. Prof. Ayotte *“has never heard of T/E values being a marker, let alone a mandatory marker of other anabolic steroids than those directly metabolized into testosterone or epitestosterone such as testosterone of course and its precursors DHEA and androstenedione”*¹¹.
143. Specifically in relation to the Athlete, Prof. Ayotte states that the excretion data in the Washout Schedules is *“entirely plausible”* and consistent with her experience of the substances in question *“considering that the doping regimens were unknown”*. The results recorded in EDP0019 are *“coherent with the rapid clearance of oral DMT”*. Total elimination was achieved within 11 days. Prof. Ayotte

¹⁰ Footnote omitted.

¹¹ Footnote omitted.

states that she cannot understand why Prof. Graham “*qualified as ‘unsound scientifically’ the rapidly decreasing abundances: considering the short detection periods and the relatively high intensity of the metabolite in the first samples for each case, a rapid decrease is expected*”. The Athlete’s reported T/E values “*are consistent and support that the samples were produced by the same person*”.

144. Professor Ayotte concludes her report by noting that:

“With respect, it is difficult to understand how Professor Graham could reach the extremely firm conclusions he reached – referring, as he does, to scientific impossibility – in circumstances where (i) we are dealing with imprecise, approximated concentrations based on peak abundance, (ii) the specific gravity of the samples is not given and (iii) we have absolutely no information about the doping regimen (timing, dose, mode of administration, date of cessation etc.)”

(2) *Cross-examination*

145. Professor Ayotte gave oral evidence at the hearing, further challenging Prof. Graham’s findings. In cross-examination by counsel for the Athlete, Prof. Ayotte described her background and experience. When asked whether she could say that the tests referred to in the Washout Schedules had really taken place, she answered: “*of course we can say so for some of the them, they were official tests, so the bottles were opened, there was some testing done and the notes that were taken by the lab were recorded, so these tests must have occurred*”. Prof. Ayotte agreed with counsel for the Athlete that it would not be possible to do an “*excretion curve*” solely on the basis of the information in the Washout Schedules, but the Washout Schedules nevertheless give a very good idea of the “*intensity of the peak*”.

(d) Prof. Christophe Champod and Dr Tiia Kuuranne

146. The IAAF relies on seven reports by Prof. Champod and Dr. Kuuranne, examining whether urine sample bottles had been forcibly opened and resealed. Prof. Champod also attended the hearing and gave live oral evidence.

147. Without criticising in any way the diligent and detailed work of Prof. Champod and Dr. Kuuranne, none of the bottles they examined relate to the Athlete. While their expert testimony would undoubtedly be of value in a different context (for instance to substantiate certain findings of the McLaren Reports), the Panel considers that their evidence is of limited relevance and does not provide material assistance in relation to the central question in this case: whether the Athlete has used prohibited substances.

IX. MERITS

A. Liability

148. Whereas this is an appeal against the first instance decision of the Sole Arbitrator in the Challenged Decision, Rule 42.20 of the IAAF Rules mandates that this procedure takes the form a re-hearing *de novo*. Likewise, Article R57 of the Code provides that:

“The Panel has full power to review the facts and the law. It may issue a new decision which replaces the decision challenged or annul the decision and refer the case back to the previous instance. The President of the Panel may request communication of the file of the federation, association or sports-related body, whose decision is the subject of the appeal. Upon transfer of the CAS file to the Panel, the President of the Panel shall issue directions in connection with the hearing for the examination of the parties, the witnesses and the experts, as well as for the oral arguments”.

149. It follows that the Panel is not bound in any way by the findings of the Sole Arbitrator at first instance, whether on the law or the facts, nor is the Panel restricted in the scope of its enquiry to procedural irregularities. This Award is, in effect, a fresh decision, based solely on the evidence put before this Panel in these proceedings.
150. The Panel is mindful of the unusual characteristics of this case. The Athlete has not – officially at least – tested positive for any prohibited substances. Unlike most other doping cases where there is an official ‘positive’ test result, here there are none, and no B sample to be tested. The allegations primarily stem from the EDP documents. The Athlete contends that he *“cannot ascertain the provenance and authenticity of the evidence against him and is not in a position to understand the evidence brought against him, let alone counter such evidence”*. He says that he *“is confronted with an impossible situation: he is wrongly accused and prevented from proving that the EDP documents are not authentic...”*.

(a) Legal framework

151. The Athlete has been accused by the IAAF of breaching Rule 32.2(b) of the 2012/2014 IAAF Rules, which states that:

“(b) Use or Attempted Use by an Athlete of a Prohibited Substance or a Prohibited Method.

- (i) it is each Athlete’s personal duty to ensure that no Prohibited Substance enters his body. Accordingly, it is not necessary that intent, fault, negligence or knowing Use on the Athlete’s part be demonstrated in order to establish an anti-doping rule violation for Use of a Prohibited Substance or a Prohibited Method.*
- (ii) the success or failure of the Use or Attempted Use of a Prohibited Substance or Prohibited Method is not material. It is sufficient that the Prohibited Substance or Prohibited Method was Used, or Attempted to be Used, for an anti-doping rule violation to be committed”.*

(1) Establishing ADRVs under the IAAF Rules

152. The 2012/2014 IAAF Rules expressly set out the methods to be adopted to establish *“Facts and Presumptions”* in relation to ADRVs. Rule 33.3 states that:

“Facts related to anti-doping rule violations may be established by any reliable means, including but not limited to admissions, evidence of third Persons, witness statements, experts reports, documentary evidence,

*conclusions drawn from longitudinal profiling [such as the Athlete Biological Passport] and other analytical information*¹².

153. The Athlete argues that the Panel should be slow to rely on the EDP evidence because the McLaren Reports are not intended to be used as evidence of ADRVs by individual athletes. The Athlete referred to certain individuals who are named in the McLaren Report and were subsequently “cleared of wrongdoing”.
154. The Panel notes that Rule 33.3 of the 2012/2014 IAAF Rules does not specify that evidence must have been created or obtained specifically for the purpose of proving ADRVs. Rule 33.3 states that the party with the burden of proving an ADRV – in this case the IAAF – may resort to “*any reliable means*”. The use of the word “*any*” makes clear that there is no restriction on the type or nature of evidence that may be adduced. However, the Panel can only reach findings of fact on the basis of evidence that is reliable.

(2) *The burden and standard of proof*

155. The burden and standard of proof to be met in this case is set out in Rule 33.1 of the 2012/2014 IAAF Rules:

“The IAAF, the Member or other prosecuting authority shall have the burden of establishing that an anti-doping rule violation has occurred. The standard of proof shall be whether the IAAF, the Member or other prosecuting authority has established an anti-doping rule violation to the comfortable satisfaction of the relevant hearing panel, bearing in mind the seriousness of the allegation which is made. This standard of proof in all cases is greater than a mere balance of probability but less than proof beyond a reasonable doubt”.

156. Two points flow from this. First, the standard of proof to which the IAAF must satisfy the Panel is that of “*comfortable satisfaction*”, bearing in mind the particular seriousness of the allegations made in this case.
157. Second, it is the IAAF that must satisfy the Panel that the Athlete has committed ADRVs (not the other way around). That is not to say that the Athlete does not have a role to play in these proceedings. It is open to him to produce evidence and to make legal submissions on the case advanced by the IAAF. He fully availed himself of that opportunity in this case: he has been legally represented throughout the procedure and has engaged two experts to produce reports in relation to the forensic analysis of 35 EDP documents (Mr. Rundt) and on the scientific feasibility of the information contained in the Washout Schedules (Prof. Graham). To be clear, while it is the Athlete that has initiated these proceedings, the onus is on IAAF to prove the allegations.
158. The Athlete argues that because of the nature of the evidence in this case, he is unable to disprove the content of the EDP documents because he does not know *inter alia* who created

¹² The words in square brackets were added to Rule 33.3 in the 2014 IAAF Rules. The Panel does not consider that this change makes any material difference for the purposes of this appeal.

these documents, where and when they were extracted and how they came into the possession of anti-doping authorities. In essence, his case is that he does not know why her name appears in the EDP documents and that at least some of the information contained therein (insofar as it relates to him) is not true. Bearing this in mind, the Panel has approached its task with a degree of anxious scrutiny, particularly in relation to the authenticity of the EDP documents relied on by the IAAF. In relation to each and every piece of evidence that relates to the Athlete, it is for IAAF to satisfy the Panel to the requisite standard that the document in question is authentic and that its content is true.

(b) Evidence

159. Turning to the evidence in this case, the Athlete emphatically denies ever having used a prohibited substance. Beyond denial of the allegations, the Athlete’s written and oral testimony provides relatively little by way of any corroborating or exculpatory evidence. The Panel is not convinced that his “*personal circumstances*” in 2013 were such that he had no “*legitimate and sound*” reason to participate in a washout programme. Despite an ankle operation in February 2013, he attended training camps in April and May 2013, and participated in a competition in Rome on 6 June 2016 and the Russian National Championships held in Moscow in July 2013.
160. The only other witness of fact in this procedure is Dr. Rodchenkov. However, the Panel is unable to place much weight on his evidence, both his written and oral testimony. At the hearing, Dr. Rodchenkov was somewhat evasive and failed to answer many of the questions directed at him. Moreover, Dr. Rodchenkov has very little to contribute specifically in relation to the Athlete. The assertion in his witness statement that he believes the Athlete “*benefitted from the Program*” and was “*engaged in doping over the course of years*” is little more than a mere assertion.
161. The Panel cannot accept Dr. Rodchenkov’s statement in oral testimony that he recalls speaking to the Athlete’s coach about doping on various occasions in 2012 and 2013. This was not mentioned in his witness statement and when challenged, Dr. Rodchenkov said that this was because his witness statement was limited to “*general information*” and that it would have become confusing had he given more detail about his knowledge of and integrations with individual athletes and coaches. This is not a good reason.
162. The task for the Panel is to determine whether the EDP documents are a reliable means (within the meaning of Rule 33.3 of the 2012/2014 IAAF Rules) by which it can be comfortably satisfied that the Athlete has used prohibited substances (within the meaning of Rule 33.1 of the 2012/2014 IAAF Rules). It follows that the alleged ADRVs in this case will turn, to a large measure, on the reliability of the EDP documents relied upon by IAAF in this case:
 - a. the Emails (EDP0276, EDP0278, EDP0279, EDP0432, EDP0434 and EDP1182);
 - b. the London Washout Schedules (EDP0019, EDP0021 and EPD24); and
 - c. the Moscow Washout Schedules (EDP0028).
163. The IAAF relies primarily on these documents (as well as other facts and evidence) from which it asks the Panel to infer that the Athlete used prohibited substances. These documents are the

only evidence directly linking the Athlete with the ADRVs alleged by the IAAF. There is no evidence as to the particulars of the alleged ADRVs: it is not known precisely when and how the prohibited substances were allegedly administered by the Athlete. It is not known who allegedly administered the substances. And it is not known if the Athlete was aware of the alleged doping, or even of the existence of a general doping scheme.

164. The Panel recognises that the purpose of the McLaren Reports was to make findings in relation to an alleged general doping scheme in Russia. This was recognised by Prof. McLaren in his second report:

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

165. References to an athlete’s name in the McLaren Reports, or references to an athlete or sample numbers in the Washout Schedules does not suffice – without more – to establish ADRVs against an individual athlete. The Panel must consider references to the Athlete in the EDP documents together with all of the other evidence advanced by the parties.
166. Likewise, the Panel considers that the mere existence of a doping scheme does not suffice for the purposes of establishing ADRVs in individual cases. However, the existence of such a scheme is a relevant fact to be taken into account in the evaluation of the evidence. The Athlete does not appear to deny the existence of a doping scheme in Russia during the relevant period. At first instance, he stated that he could “partially agree” with the McLaren Reports. Likewise, it was submitted for the Athlete during closing submissions at the hearing that part of Dr. Rodchenkov’s account “might be true” and that “part of it might not be true”. The existence of a general doping scheme has been acknowledged (to some extent) by the Russian Ministry of Sport in a letter to WADA on 13 September 2018.

(1) *Emails*

167. It is recalled that the Emails contain the following references to the Athlete:
- a. Email 1, dated 19 October 2012, refers to one of the Athlete’s samples (2747269) and records a T/E ratio of 9.5.
 - b. Email 2, dated 2 March 2014, refers to one of the Athlete’s samples (2868440) and notes: “*ostarine in very trace amounts, trace oral-turinabol (but possible...)*”.

- c. Email 3, dated 3 March 2014, mentions the Athlete by name and refers to sample 2868440, recording a T/E ratio of 8.9.
 - d. Email 4, dated 3 March 2014, which is Dr Rodchenkov's response to Email 3, does not mention the Athlete, but it does put matters into perspective. Dr. Rodchenkov refers to some samples being "*CLEARLY POSITIVE*".
 - e. Email 5, dated 22 July 2014, refers to one of the Athlete's samples and states: "*T/E=5,5 and boldenone (quite possibly it's an endogenous boldenone, IRMS is required ...)*".
 - f. Email 6, dated 22 July 2014, refers to another sample, 2920565, also indicates that boldenone is present (although this may be endogenous). The word "*SAVE*" appears above the Athlete's sample number.
168. In Email 6, the word "*SAVE*" appears above the Athlete's sample number. The Athlete argues that that if he had been a "*protected athlete*" as claimed by IAAF, there would have been no need for the instruction to "*SAVE*" his sample. The Panel is not persuaded by this reasoning: it remains that Dr. Rodchenkov decided, on the basis of the Athlete's sample, that action was required to avoid detection.
169. The Panel does not draw any conclusions in relation to the indicated T/E ratios: these alone do not suffice to prove an ADRV. Likewise, the reference to "*boldenone*" in Email 5 and Email 6 do not meet the required threshold of comfortable satisfaction due to the comment in those emails stating that this substance may be endogenous.
170. In relation to the Emails, the evidence of Mr. Sheldon was clear. In particular, the analysis of the DKIM signatures present in four of the 11 emails examined by Mr. Sheldon and Mr. Rundt is particularly persuasive. Even Mr. Rundt had to accept that the presence of a DKIM signature makes it "*quite highly probable*" that the email in question was actually sent on the day and at the time indicated. Although those who extracted and handled the EDP documents may not have adopted the "*gold standard*" of forensic best practices advanced by Mr. Rundt, the Panel is comfortably satisfied as to the authenticity of Email 3, Email 4 and Email 6. The word "*authenticity*" here is used in the technical sense: the Panel finds that those emails are genuine; they were sent and received by the email addresses displayed in Mr. Sheldon's Report, on the day and at the time indicated, and the body of those emails has not been subsequently manipulated or modified (whether knowingly or unknowingly).
171. The Panel now turns to the other three emails (Email 1, Email 2 and Email 5). Again, the Panel favours the evidence of Mr. Sheldon over Mr. Rundt. Whereas these emails do not have a DKIM signature, Mr. Sheldon's report shows that there are no irregularities in the underlying metadata. Mr. Rundt agrees to some extent, but argues that there is *theoretical* possibility that these emails may have been fabricated or manipulated. He suggests that this could have been done by setting back the clock in a computer system. However, Mr. Sheldon has demonstrated that whereas this may create a document that passes scrutiny in isolation, there is third party corroboration in the headers of Email 3, Email 4 and Email 6. The "*hops*" analysis provides an

additional layer of comfort. As a result, the Panel is comfortably satisfied that Email 1, Email 2 and Email 5 are authentic (in the same way as Email 3, Email 4 and Email 6).

172. The Panel therefore concludes that the Emails are reliable evidence for the purposes of Rule 33.1 of the 2012/2014 IAAF Rules.

(2) *Washout Schedules*

173. As to the London Washout Schedules: EDP0019, EDP0021 and EDP0024 refer to three official samples taken from the Athlete on 16, 21 and 27 July 2012:

EDP0019

| | | | | | |
|------|---------|---|------------|-----------|--|
| 8775 | 2730565 | m | 16.07.2012 | Novogorsk | T/E = 10, dehydroepiandrosterone, desoxymethyltestosterone 460000, blood transfusion? (phthalates) |
|------|---------|---|------------|-----------|--|

EDP0021

| | | | | | |
|------|---------|---|------------|---|--|
| 9079 | 2727722 | m | 21.07.2012 | T/E = 10, desoxymethyltestosterone 40,000 | |
|------|---------|---|------------|---|--|

EDP024

| | | | | | |
|------|---------|---|------------|-----------|---------|
| 9332 | 2727845 | m | 27.07.2012 | Novogorsk | T/E = 6 |
|------|---------|---|------------|-----------|---------|

174. The Athlete accepts that these samples were taken from him on that date, but he denies that two of these contained prohibited substances as stated (dehydroepiandrosterone and DHCMT).
175. The Athlete also appears in four entries in the Moscow Washout Schedules (EDP0028) as follows:

| | | |
|--------------------|------------------------------------|--|
| <i>Adams 06/07</i> | <i>following a heavy scheme!!!</i> | <i>T/E 15, nandrolone 200 000 (impurity), trenbolone 15m, oxandrolone 50m, methenolone 50m</i> |
| <i>Adams 17/07</i> | | <i>T/E 9, oxandrolone 30 000</i> |
| <i>Adams 25/07</i> | <i>Russia</i> | <i>T/E 6 clear</i> |

176. The Athlete refers to discrepancies in the EDP to the effect that these documents are not sufficiently reliable to substantiate ADRVs. The Athlete points to differences in the level/concentration of certain prohibited substances. For instance, there are two entries in EDP0028 and EDP0029 which indicate a different level/concentration of methasterone in relation to two samples collected from two different athletes (not the Appellant).
177. The Panel recalls Prof. Ayotte’s evidence that the level or concentration of prohibited substances recorded in the Washout Schedules are merely “*abundance or peak heights*”. The

Washout Schedules are only fit for the purpose of detecting a prohibited substance, but it is not possible to determine the specific amount of any substance allegedly used by an athlete.

178. The Panel considers that the discrepancies in EDP0028 and EDP0029 relating to the level/concentration of methasterone in two samples (not relating to the Athlete) do not suffice to discredit the EDP as a whole to such an extent that it is not “reliable” for the purposes of Rule 33.3 of the 2012/2014 IAAF Rules. Such differences can readily be explained by the process by which the Schedules were prepared and edited. Were the Panel called upon to determine the precise level or concentration of a prohibited substance solely by reference to the Washout Schedules, it would not be able to do so. However, for the purposes of this case, the Panel is merely required to establish whether the Athlete has used any prohibited substances, the level or concentration of which is not material for the purposes of establishing liability (although it may be relevant in relation to sanction).

(3) *Expert Evidence*

179. The parties have each advanced expert evidence in two separate fields: technical forensics and doping. With regard to the expert technical forensic evidence, the Panel favours that of Mr. Sheldon. Mr Rundt’s challenge to the authenticity of EDP0019, EDP0021, EDP0024 and EDP0028 is largely theoretical in nature. He did not – and in his view could not – identify any forensic trace of manipulation, forgery or fabrication. In essence, Mr. Rundt is inviting the Panel to disregard these documents on the basis that it is merely *possible* that an unknown person has forged, manipulated or fabricated these documents at some time and for reasons unknown.
180. Mr. Sheldon examined the file metadata relating to EDP0019, EDP0021, EDP0024 and EDP0028. This indicates that all were all created contemporaneously. In particular, Mr. Sheldon’s report describes in detail the sequence of events by which EDP0019 was edited, saved and sent by email (in the form of EDP1168). The email attaching EDP1168 was sent from a Gmail address known to be that of Dr. Sobolevsky on the same day (EDP1167). Mr. Sheldon observes that this email contains “*the appropriate Gmail authentication*” and that “*the headers are legitimate and show no irregularities in timing*”.
181. In relation to the expert pharmacokinetic evidence, again the Panel favours the expert evidence filed on behalf of the IAAF. At the hearing, Prof. Graham was invited to, and did, withdraw many of the conclusions reached in his expert report. It became apparent during his oral testimony that significant parts of his report were premised on unstated assumptions with little basis in reality and that on at least one occasion, he referred to literature that did not support his stated findings. In contrast, Prof. Ayotte demonstrated a high level of expertise in relation to the testing of the two prohibited substances alleged to have been taken by the Athlete. On the basis of Prof. Ayotte’s evidence, the Panel concludes that the data contained in EDP0019, EDP0021, EDP0024 and EDP0028 referring to the Athlete is scientifically credible.
182. On the basis of the expert evidence, the Panel concludes that EDP0019, EDP0021, EDP0024 and EDP0028 are authentic documents, which are genuinely part of the Washout Schedules described in the McLaren Reports, and that the data therein referring to the Athlete is

scientifically credible. As such, these documents are reliable evidence for the purposes of Rule 33.1 of the 2012/2014 IAAF Rules.

(c) Conclusions on liability

183. In a case such as this where there are various non-analytical evidentiary elements, the Panel considers that these should be assessed separately and together. This requires an evaluation of the cumulative weight of the EDP insofar as it relates specifically to the Athlete. This approach is illustrated in CAS 2015/A/4059, as follows:

“In Attorney General for Jersey v Edmond-O’Brien, in a decision of the Privy Council (2006 1 WLR 1485), Lord Hoffman, said this in criticism of the Jersey Court of Appeal’s judgment, which the Board overturned (para. 25):

Although they said that they had reviewed the evidence ‘separately and together’, there is little indication that they had regard to the cumulative weight of the various items of evidence, to each of which they had, sometimes not altogether plausibly, assigned a possible innocent explanation. It is in the nature of circumstantial evidence that single items of evidence may each be capable of an innocent explanation but, taken together, establish guilt beyond reasonable doubt.

Although that statement was articulated in the context of a criminal case, in the Panel’s view, Lord Hoffmann’s reasoning applies, mutatis mutandis, to the situation where a Tribunal is mandated to have ‘comfortable satisfaction’ before it can inculcate a sportsperson of a disciplinary offence, a fortiori where certain pieces of evidence are themselves suspicious”.

184. In CAS 2018/O/5713, this approach is aptly referred to this as: *“a rope comprised of several cords: one strand of the cord might be insufficient to sustain the weight, but three strands together may be quite of sufficient strength”.*
185. Whereas counsel for the Athlete sought to distinguish CAS 2015/A/4059 on the facts, the Panel can see no reason why this approach is inapplicable in this case. At the hearing, counsel for the Athlete argued that there is no *“first-hand knowledge”* in this case and urged the Panel not to approach this case by *“adding up unreliable evidence”*. It is in the face of such circumstantial evidence that the Panel should consider each element individually, but also the global weight of the evidence as a whole.
186. The Panel recalls that the burden of proof is firmly on the IAAF to prove the alleged ADRVs. The applicable standard of proof is that of *“comfortable satisfaction”*. The IAAF may resort to *“any reliable means”* to prove the alleged ADRVs. Such *“reliable means”* includes circumstantial evidence, including the Washout Schedules (CAS 2015/A/4059). The Panel reiterates that its findings in this case are strictly limited to the evidence and submissions pertaining to the Athlete.
187. The Panel notes that EDP0019, EDP0021, EDP0024, EDP0028 and the Emails do not merely contain references to the Athlete (by sample number in EDP0019, EDP0021, EDP0024 and Emails 1, 2 and 5; by name in EDP0028; and by both name and sample number in Emails 3, 4

and 6). These documents also contain *inter alia* specific dates, substances and abundances. These documents must be considered against the backdrop of the McLaren Reports and the Schmidt Report, as well as the corpus of EDP documents underpinning them. As to the reliability of the Washout Schedules, the Panel notes that certain matters recorded therein appear to have been subsequently shown to be true. For instance, there were 13 samples (none of which relate to the Athlete) which re-tested positive for DHCMT after the 2012 London Olympic Games. Of those 13 athletes, 10 appear in the London Washout Schedules with indications that their samples contained DHCMT. Whereas none of those athletes are the Appellant, the Panel cannot ignore the existence of a general doping scheme and the fact that at least some of the data in the EDP documents has been independently corroborated.

188. The fact that the Athlete's sample collected at the 2012 Olympic Games subsequently re-tested negative in 2016 does not disprove the evidence relied on by the IAAF in this case. The purpose of the Washout Schedules was to ensure that athletes would not test positive at the 2012 Olympic Games and the 2013 World Championships. The finding that the Athlete's sample did not contain any prohibited substances at the time of the 2012 Olympic Games can be attributed to the success of the general doping scheme prevalent in Russia from 2011 to 2015. Likewise, the Panel does not accept that the Athlete's test results recorded in ADAMS can be relied upon to dislodge the information recorded in the EDP documents. The Panel has no doubt about the existence of a general doping scheme in Russia. Such a scheme could only succeed to the extent that it did with the benefit of falsified results being recorded in ADAMS.
189. Bearing in mind the expert evidence which has been accepted by the Panel, namely that there is no evidence of any forensic manipulation, forgery or fabrication, and that the data is scientifically credible, the Panel is comfortably satisfied that EDP0019, EDP0021, EDP0024, EDP0028 and the Emails are reliable means to establish ADRVs. The Panel has carefully considered each and every entry in the EDP documents relating specifically to the Athlete. These documents were created, edited and communicated contemporaneously by persons heavily implicated in the general doping scheme in Russia and by those responsible for overseeing athletes' physical conditions. There is no evidence that these documents were fabricated or manipulated for the purpose of wrongfully implicating the Athlete. Whereas minor discrepancies exist within the EDP, this does not dislodge the reliability of the evidence insofar as it relates to the Athlete using prohibited substances.
190. The Panel concludes that EDP0019, EDP0021, EDP0024, EDP0028 and the Emails are sufficiently reliable to form the basis of a finding that the Athlete has committed ADRVs. Moreover, it is difficult to see how these particular substances could have been used without the Athlete knowing that they were used or administered (although, for the purposes of liability, the Panel is not required to make a finding on whether the Athlete knowingly used the prohibited substances pursuant to Rule 32.2(b)(i) which states that use of a prohibited substance is established by way of strict liability; see above). The Panel has come to this conclusion bearing in mind the particular seriousness of the allegations and the significant impact this will have on the Athlete.

191. In relation to the Washout Schedules (EDP0019, EDP0021, EDP0024 and EDP0028), the Panel is comfortably satisfied that these accurately record prohibited substances used by the Athlete.
192. In relation to the Emails:
- a. Emails 1, 3 and 4 refer only to the Athlete's T/E ratio¹³. While this is stated to be a "*suspiciously high value*" in Email 1, the Panel does not consider that references to the Athlete's T/E value in these three Emails (without more) is sufficient to establish an ADRV to the requisite standard.
 - b. Emails 5 and 6 (EDP0432 and EDP0434) state that the Athlete's sample (2920565) collected on 18 July 2014 was found to contain: "*T/E 5,5 and boldenone – anabolic steroid (quite possible it's an endogenous boldenone, IRMS is required ...)*". Due to the uncertainty expressed in these two Emails – in particular the quoted words which are parenthesis – the Panel cannot be comfortably satisfied that the Athlete used boldenone on or before 18 July 2014.
 - c. Email 2 (EDP0276) states that the following substances were present in the Athlete's sample (286440): "*ostarine in very trace amounts, trace oral-turinabol (but possible ...)*". Here again, the uncertainty expressed specifically in relation to oral turinabol – in particular the words – in particular the words "*but possible*" in parenthesis – the Panel is not comfortably satisfied that the Athlete used oral-turinabol. By contrast, no such uncertainty is expressed in relation to ostarine; it is merely recorded that this substance was detected "*in very trace amounts*".
193. On this basis, the Panel is comfortably satisfied that:
- a. on or before 16 July 2012, the Athlete used dehydroepiandrosterone and desoxymethyltestosterone (DCMHT);
 - b. on or before 6 July 2013, the Athlete used nandrolone, trenbolone, oxandrolone, and methenolone (metenolone); and
 - c. on or before 26 February 2014, the Athlete used ostarine.
194. All seven of these substances are, and were at the relevant times, prohibited under section S.1(a) of the WADA List of Prohibited Substances and Methods (the "WADA List"). As such, they are prohibited at all times (not just in-competition). It follows that the Athlete has violated Rule 32.3(b) of the 2012/2014 IAAF Rules.

¹³ Email 1 (EDP1182); Email 3 (EDP0278); Email 4 (EDP0279).

B. Sanction

195. Prior to the Challenged Decision, the Athlete has never been found guilty of committing any ADRVs. It follows that the findings of the Panel in this Award (and likewise in the Challenged Decision) are the Athlete's first violations.

196. Rule 40.2 of the 2012/2014 IAAF Rules states that:

“The period of Ineligibility imposed for a violation of Rules 32.2(a) (Presence of a Prohibited Substance or its Metabolites or Markers), 32.2(b) (Use or Attempted Use of a Prohibited Substances or Prohibited Method) or 32.2(f) (Possession of Prohibited Substances and Prohibited Methods), unless the conditions for eliminating or reducing the period of Ineligibility as provided in Rules 40.4 and 40.5, or the conditions for increasing the period of Ineligibility as provided in Rule 40.6 are met, shall be as follows:

First Violation: Two (2) years' Ineligibility”.

197. It follows that the starting point in this case is the imposition of a two-year period of ineligibility. The next two steps are to establish whether there exist:

- a. any conditions to eliminate or reduce the two-year period of ineligibility pursuant to Rules 40.4 and 40.5 of the 2012/2014 IAAF Rules; or
- b. any conditions to increase the two-year period of ineligibility under Rule 40.6 of the 2012/2014 IAAF Rules.

(a) Conditions for eliminating or reducing the period of ineligibility

198. The Athlete has not advanced any submissions for the purposes of eliminating or reducing the period of ineligibility under Rules 40.4 and 40.5 of the 2012 IAAF Rules. Nevertheless, the Panel considers that it is appropriate to consider *proprio motu* the applicability of these provisions.

199. Rule 40.4 of the 2012/2014 IAAF Rules (***“Elimination or Reduction of Period of Ineligibility for Specified Substances under Specific Circumstances”***) applies where the Athlete (or another person) can *“establish how a Specified Substance entered his body or came into his Possession and that such Specified Substance was not intended to enhance the Athlete's sport performance or mask the Use of a performance enhancing substance”*. Crucially, the prohibited substances which the Panel is comfortably satisfied that the Athlete used fall within section S1(a) of the WADA List. As such, they are not *“Specified Substances”* for the purposes of Rule 40.4, with the result that Rule 40.4 does not apply in this case.

200. Rule 40.5 of the 2012/2014 IAAF Rules (***“Elimination or Reduction of Period of Ineligibility Based on Exceptional Circumstances”***) sets out four exceptional circumstances which mandate the elimination or reduction of the period of ineligibility:

- a. Rule 40.5(a) applies if the Athlete (or another person) can establish *“No Fault or Negligence”*. This requires the Athlete to establish *“how the Prohibited Substance entered his system in order to have his period of Ineligibility eliminated”*.

- b. Rule 40.5(b) applies if the Athlete (or another person) can establish “*No Significant Fault or Negligence*”. Again, this requires the Athlete to establish “*how the Prohibited Substance entered his system in order to have his period of Ineligibility reduced*”.
 - c. Rule 40.5(c) applies if the Athlete (or another person) provides “*Substantial Assistance to the IAAF, his National Federation, an Anti-Doping Organisation, criminal authority or professional disciplinary body*”.
 - d. Rule 40.5(d) applies if the Athlete (or another person) “*voluntarily admits the commission of an anti-doping rule violation*” within a specified timeframe.
201. As explained above, liability under Rule 32.2(b)(i) is a rule of strict liability. An ADRV is established notwithstanding any intent, fault, negligence or knowledge on the part of the Athlete. By contrast to the issue of liability under Rule 32.2(b)(i), the state of knowledge of the Athlete is relevant to the question of sanction under Rule 40.
202. The Athlete in this case expressly denies using any prohibited substances and – contrary to the Panel’s findings on liability – does not accept the veracity of the data relating to him in EDP0019, EDP0021, EDP0024, EDP0028 and the Email. The Athlete has not adduced any evidence as to why his name and/or sample numbers appear in these documents. The Athlete merely advances a bare denial: he states that he did not use any prohibited substances and has no idea why or how his name and sample numbers appear in EDP0019, EDP0021, EDP0024, EDP0028 and the Email. It follows from this that none of the exceptional circumstances in Rule 40.5 are applicable in this case. The Athlete:
- a. steadfastly denies committing any ADRVs (ruling out the application of Rule 40.5(d));
 - b. has not advanced any evidence as to how the alleged prohibited substances entered his body (rendering Rule 40.5(a) and (b) inapplicable on the basis that these rules expressly require the Athlete to “*establish how the Prohibited Substance entered his system in order to have the period of Ineligibility*” eliminated or reduced); and
 - c. has not provided substantial assistance to the IAAF, RUSAF or any other anti-doping organisation, criminal authority or professional disciplinary body (discounting Rule 40.5(c)).
203. The Panel is bound by the terms of the 2012/2014 IAAF Rules; it cannot look outside of these rules in seeking to establish conditions to eliminate or reduce the period of ineligibility.

(b) *Conditions for increasing the period of ineligibility*

204. Having established that none of the conditions to eliminate or reduce the period of ineligibility apply, the Panel must now consider whether there are any conditions present mandating an increase pursuant to Rule 40.6 of the 2012/2014 IAAF Rules. The Athlete argues – in the alternative to the arguments on the issue of liability – that there are no such conditions present

and that as a result the four-year period of ineligibility imposed in the Challenged Decision should be replaced by a two-year period.

205. Rule 40.6 of the 2012/2014 IAAF Rules provides that:

“If it is established in an individual case involving an anti-doping rule violation other than violations under Rule 32.2(g) (Trafficking or Attempted Trafficking) and Rule 32.2(h) (Administration or Attempted Administration) that aggravating circumstances are present which justify the imposition of a period of Ineligibility greater than the standard sanction, then the period of Ineligibility otherwise applicable shall be increased up to a maximum of four (4) years unless the Athlete or other Person can prove to the comfortable satisfaction of the hearing panel that he did not knowingly commit the anti-doping rule violation.

- (a) Examples of aggravating circumstances which may justify the imposition of a period of Ineligibility greater than the standard sanction are: the Athlete or other Person committed the anti-doping rule violation as part of a doping plan or scheme, either individually or involving a conspiracy or common enterprise to commit anti-doping rule violations; the Athlete or other Person used or possessed multiple Prohibited Substances or Prohibited Methods or used or possessed a Prohibited Substance or Prohibited Method on multiple occasions; a normal individual would be likely to enjoy performance-enhancing effects of the anti-doping rule violation(s) beyond the otherwise applicable period of Ineligibility; the Athlete or other Person engaged in deceptive or obstructing conduct to avoid the detection or adjudication of an anti-doping rule violation. For the avoidance of doubt, the examples of aggravating circumstances referred to above are not exclusive and other aggravating factors may also justify the imposition of a longer period of Ineligibility.*
- (b) An Athlete or other Person can avoid the application of this Rule by admitting the anti-doping rule violation as asserted promptly after being confronted with the anti-doping rule violation (which means no later than the date of the deadline given to provide a written explanation in accordance with Rule 37.4(c) and, in all events, before the Athlete competes again).”*

206. The Panel observes that the list of aggravating features in Rule 40.6(a) is not exhaustive; this is clear from the last sentence of the provision.

207. Rule 40.7(d)(i) of the 2012 IAAF Rules expressly recognises that *“the occurrence of multiple violations may be considered as a factor in determining aggravating circumstances (Rule 40.6)”*.

208. The IAAF invites the Panel to maintain the maximum four-year period imposed by the Sole Arbitrator at first instance on the basis of the following alleged aggravating circumstances:

- a. the Athlete used a range of exogenous anabolic steroids on multiple occasions;
- b. he featured in two Washout Schedules programs the purpose of which was to protect athletes from doping (he provided unofficial samples and those of his official samples which tested positive were falsely reported as being clean); and

- c. the washout testing was carried out in the run up to the most important athletics events (the 2012 London Olympic Games and the 2013 World Championships in Moscow).
209. The Athlete argues that “*particularly cogent*” evidence is required and that aggravating circumstances have not been established in his individual case. In the alternative, he argues – by reference to a number of authorities – that this case does not merit the maximum penalty of four years ineligibility.
210. For the reasons explained above, the Panel has approached its task with a degree of anxious scrutiny. This flows from the fact that the ADRVs in this case are proved on the basis of non-analytical evidentiary elements. The Panel bears in mind that no evidence has been adduced by the IAAF as to the state of mind of the Athlete. Rules 32.2(b)(i) and 40.2 of the 2012/2014 IAAF Rules impose a two-year period of ineligibility as a starting point on the basis of strict liability (see above: “*it is not necessary that intent, fault, negligence or knowing Use on the Athlete’s part be demonstrated in order to establish an anti-doping rule violation for Use of a Prohibited Substance or a Prohibited Method*”). As such, a two-year period of ineligibility is the inexorable starting point. The Panel has already established that none of the conditions for eliminating or reducing the period of ineligibility apply in this case. The next and final stage in the analysis is to examine the potential aggravating circumstances which may increase the period of ineligibility pursuant to Rule 40.6 of the 2012/2014 IAAF Rules.
211. In the view of the Panel, there is no reliable evidence as to what was known by the Athlete at the time of the ADRVs. Whereas the Panel is comfortably satisfied that the Athlete used prohibited substances, it is not known precisely when and how the prohibited substances were used. Without any evidence as to the state of knowledge of the Athlete at the time of ADRVs, the Panel cannot be satisfied to the required standard that he was aware that he was part of a wider “*doping plan or scheme*” orchestrated by Dr. Rodchenkov, his colleagues and collaborators. The Panel finds that although such a doping plan or scheme did exist in Russia at the relevant time, it has not been established that the Athlete was a knowing participant. It may be argued that due of the nature prohibited substances in this case (anabolic agents), the Athlete must have known of their use. However, there is no evidence before the Panel to demonstrate that the Athlete knew that he was part of a wider doping plan or scheme, either individually or involving a conspiracy or common enterprise. In these circumstances, where it cannot be shown that the Athlete was aware of the existence of a wider doping plan or scheme at the time the prohibited substances were used, the Panel considers that the mere existence of a plan or scheme does not, of itself, amount to an aggravating circumstance under Rule 40.6(a) of the 2012/2014 IAAF Rules. This flows from the language of Rule 40.6(a): where such a scheme exists, but it cannot be proved that the Athlete is aware of it, it is difficult to see how the ADRV can be committed “*as part*” of that scheme “*either individually or involving a conspiracy or common enterprise*”.
212. The Athlete has directed the Panel’s attention to cases where prohibited substances were used on multiple occasions, but the period of ineligibility was less than four years. For instance, a sanction of three years ineligibility was imposed in circumstances where an athlete used a prohibited substance or method repeatedly in correlation with two major athletics events (CAS 2014/A/3561 & 3614).

213. At first instance, the Sole Arbitrator imposed the maximum sanction of four years' ineligibility. The Panel recognises that it should not interfere lightly with a well-reasoned first instance decision (CAS 2010/A/2283; CAS 2011/A/2518).
214. The Panel is comfortably satisfied that the Athlete used seven prohibited substances on at least three occasions, on or shortly prior to 16 July 2012, 6 July 2013 and 26 February 2014. In light of the fact that the Athlete used prohibited substances on at least three occasions over the course of 19 months, the Panel deems that the maximum sanction is merited. As such, the four-year period of ineligibility imposed in the Challenged Decision will remain.

C. Disqualification of Results

215. Rule 40.8 of the 2012/2014 IAAF Rules provides that:

“In addition to the automatic disqualification of the results in the Competition which produced the positive sample under Rules 39 and 40, all other competitive results obtained from the date the positive Sample was collected (whether In-Competition or Out-of-Competition) or other anti-doping rule violation occurred through to the commencement of any Provisional Suspension or Ineligibility period shall be Disqualified with all of the resulting Consequences for the Athlete including the forfeiture of any titles, awards, medals, points and prize and appearance money”.

216. In the Challenged Decision, the Sole Arbitrator imposed a period of disqualification starting from 16 July 2012 (the date of the first ADRV) until 14 September 2014 (the date of the Athlete's last competitive result in 2014).
217. The Athlete argues that the purpose of disqualification of results is not to punish, but to correct unfair advantage and remove tainted performances from the record (CAS 2017/A/5021; CAS 2016/O/4463). Rule 40.8 of the 2012/2014 IAAF Rules contains an *“implicit exception of fairness”* by which the Panel should consider all relevant circumstances, including the nature and severity of the infringement, the lapse of time between ADRVs, the effect of the ADRVs on the results and the absence of subsequent abnormalities or further ADRVs. It is argued that none of the Athlete's results should be disqualified because he did not draw an unfair advantage from the ADRVs.
218. In the alternative, the Athlete argues that the principle of proportionality requires a reasonable balance is struck between the misconduct and the sanction imposed (CAS 2015/A/4008). As such, the period of disqualification should not extend over periods where there is no clear evidence that the Athlete used prohibited substances. The Athlete invites the Panel to limit the period of disqualification to results obtained between 16 July 2012 and 31 July 2013.
219. The Panel concurs that the general principle of fairness is enshrined in Rule 40.8 of the 2012/2014 IAAF Rules. This encompasses the principle of proportionality. The Panel is mindful of the effect that disqualification of results will have on the Athlete, including the forfeiture of titles, awards, medals, points, and prizes, as well as appearance money. The sanction to be imposed for an ADRV must be proportionate considering both the length of the ineligibility period and the disqualification of results.

220. In cases where an athlete has used prohibited substances for an extended period of time, CAS panels have disqualified results obtained over a number of years. (CAS 2014/A/3561 & 2014/A/3614; CAS 2014/A/3668). At the same time, CAS panels frequently applied the principle of fairness and allowed results to remain in force where there is no evidence that the athlete committed ADRVs during the period of time starting from the alleged ADRV up to the period of ineligibility.
221. The Panel retains a wide discretion and is guided by the principles of fairness and proportionality.
222. As a starting point, the Panel has no hesitation in disqualifying the Athlete's results for the whole period during which the ADRVs were recorded in the EDP documents (*i.e.* from 16 July 2012 until 26 February 2014). The evidence of Prof. Ayotte is that anabolic steroids may improve an athlete's performance in a number of different ways, including speeding up recovery after injury, enabling longer periods of training, increasing stamina and providing more energy. The Panel is satisfied that the Athlete would have gained an advantage even after the date of the last positive finding recorded in Email 2 (26 February 2014). It would not be in the interests of fairness for the Athlete's results obtained immediately after 26 February 2014 to remain undisturbed. The Panel considers that the principles of fairness and proportionality require the disqualification of his results up to the end of the 2014.
223. The Panel therefore decides that the period of disqualification imposed in the Challenged Decision should not be disturbed. All competitive results obtained by the Athlete, from 16 July 2012 (the date of the first ADRV) until and including 14 September 2014 (the date of the Athlete's last competitive result in 2014) shall remain disqualified, with all of the resulting consequences pursuant to Rule 40.8 of the 2012/2014 IAAF Rules, including the forfeiture of any titles, awards, points, prizes and appearance money.

ON THESE GROUNDS

The Court of Arbitration for Sport rules that:

1. The Statement of Appeal filed by Mr. Lyukman Adams against the International Association of Athletics Federations with the Court of Arbitration for Sport (CAS) on 21 February 2019 is dismissed.
2. The decision rendered by the Sole Arbitrator in CAS 2018/O/5671 IAAF v. Russian Athletics Federation (RUSAF) & Lyukman Adams is upheld.

3. (...).
4. (...).
5. All further requests for relief are dismissed.