

**IN THE MATTER OF PROCEEDINGS BROUGHT UNDER THE ANTI-DOPING RULES  
OF THE INTERNATIONAL ASSOCIATION OF ATHLETICS FEDERATIONS**

*Before:*

Michael Beloff QC (Chair)

Prof. Moni Wekesa

Dr. Anna Bordiugova

**BETWEEN:**

**INTERNATIONAL ASSOCIATION OF ATHLETICS FEDERATIONS (“IAAF”)**

Anti-Doping Organisation

- and -

**SERGEY BAKULIN**

Respondent

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**Decision of the Disciplinary Tribunal**

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## **A. INTRODUCTION**

1. The International Association of Athletics Federations (“IAAF”), the international federation which governs the sport of athletics worldwide, on 3 April 2019 through the Athletics Integrity Unit (“AIU”) charged Mr. Sergey Bakulin (“the Athlete”), a 32-year-old racewalker from Russia, with a second Anti-Doping Rule Violation (“ADRV”) under the IAAF Anti-Doping Rules 2018 (“ADR”) in connection with abnormalities in the haematological module of his Athlete Biological Passport (“ABP”) that are alleged to indicate blood manipulation. The Athlete denies using any Prohibited Substances or Methods that could have caused the abnormalities detected in his ABP and advances alternative explanations.

2. It is not in issue that:

- (i) the ADR are applicable to the Athlete;
- (ii) for the purposes of the ADR the Athlete is an international level athlete;
- (iii) the AIU had jurisdiction for result management of the Athlete’s Samples; and
- (iv) the Tribunal has jurisdiction to determine the ADRV alleged against the Athlete.

## **B. ADRV**

3. Article 2 of the ADR specifies the circumstances and conduct that constitute ADRVs, including Article 2.2, which provides:

### **2.1 Use or Attempted Use by an Athlete of a Prohibited Substance or a Prohibited Method**

2.1.1 It is each Athlete’s personal duty to ensure that no Prohibited Substance enters his body. Athletes are responsible for any Prohibited Substance or its Metabolites or Markers found to be present in their Samples. 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.

2.1.2 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.

4. It is accordingly not in issue that:

(i) athletes are strictly responsible for any Prohibited Substance found in their bodies or method used; and

(ii) it is not necessary that intent, Fault, Negligence or knowing Use on the Athlete's part be demonstrated by the AIU to establish his ADRV.

### **C. BURDEN AND STANDARD OF PROOF**

5. Article 3.1 of the ADR provides that the IAAF shall have the burden of establishing that an anti-doping rule violation has occurred to the comfortable satisfaction of the Tribunal as follows:

3.1 The IAAF or other Anti-Doping Organisation shall have the burden of establishing that an Anti-Doping Rule Violation has been committed. The standard of proof shall be whether the IAAF has established the commission of the alleged Anti-Doping Rule Violation to the comfortable satisfaction of the hearing panel, bearing in mind the seriousness of the allegation that is made<sup>1</sup>. This standard of proof in all cases is greater than a mere balance of probability but less than proof beyond a reasonable doubt.

6. According to Article 3.2 of the ADR, an anti-doping rule violation under Article 2.2 may be established by "*any reliable means [...]*".

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<sup>1</sup> See CAS 2004/O/645 *USADA v Montgomery*, para 36

#### D. BLOOD DOPING AND THE ATHLETE BIOLOGICAL PASSPORT

7. There are three widely known substances or methods used for blood doping, namely:

- (i) administering recombinant human erythropoietin ("rEPO") (administered by injection to trigger erythropoiesis, the stimulation of red blood cells);
- (ii) synthetic oxygen carriers (i.e. infusing blood substitutes such as a haemoglobin-based oxygen carrier ("HBOC") or perfluorocarbons ("PFC") to increase HGB well above normal levels; and
- (iii) blood transfusions (i.e., infusing a matching donor's or the athlete's own (previously extracted) red blood cells to increase the haemoglobin well above normal).

8. rEPO is a Prohibited Substance and included in class 'S2. Hormones and related substances' on the World Anti-Doping Code ("WADC") Prohibited List. Synthetic oxygen carriers and blood transfusions are Prohibited Methods under class 'M1. Enhancement of oxygen via blood transfer on the same List.

9. The World Anti-Doping Agency ("WADA") developed and refined the concept of the ABP, whose *"fundamental principle"* it describes as being *"to monitor selected variables ("biomarkers of doping") over time that indirectly reveal the effect of doping, as opposed to the traditional direct detection of doping by analytical doping controls"*.

10. The ABP consists of an electronic record that compiles and collates a specific athlete's test results and other data over time and is unique to that particular athlete. The haematological module of the ABP records the values in an athlete's blood Samples of haematological parameters that are known to be sensitive to changes in red blood cell production.

11. The values collected and recorded include haemoglobin concentration ("HGB") and percentage of immature red blood cells *viz.* reticulocytes ("RET"). Haemoglobin is a molecular carrier in red blood cells transporting oxygen from the lungs to body tissue. As noted in paragraph 9.8 of the Arbitral Award in CAS 2010/A/2174 Francesco de Bonis v. CONI & UCI ("de Bonis"): *"The haemoglobin value shows the athlete's*

*capacity to produce red blood cells and thus, his capacity concerning oxygen transfer. This value is - in the absence of specific pathological conductions - a very stable one and only subject to very minor changes."* The ratio of the HGB and the RET% values is also used to calculate a further value, known as the OFF-score, which is sensitive to changes in erythropoiesis.

12. The marker values from the blood samples collected in the ABP programme are fed into a statistical model, known as the "Adaptive Model". The Adaptive Model uses an algorithm that takes into account both:

- (i) variability of such values within the population generally (i.e. blood values reported in a large population of non-doped athletes) and;
- (ii) (factors affecting the variability of the athlete's individual values (including gender, ethnic origin, age, altitude, type of sport and instrument related technology).<sup>2</sup>

13. The selected biological markers are monitored over a period of time and a longitudinal profile that establishes an athlete's upper and lower limits within which the athlete's values would be expected to fall, assuming normal physiological conditions (i.e. the athlete is healthy and has not been doping) is created.

14. The upper and lower limits have been calculated (as per the WADA ABP Operating Guidelines) with a "specificity" (i.e. likelihood) of 99%. The Adaptive Model also calculates the probability of abnormality of the sequence of values in the ABP profile.

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<sup>2</sup> Mr. Scott, the Athlete's expert, states, however: *"I have no way to evaluate the extent to which the Adaptive Model takes into consideration the "gender, ethnic origin, age, altitude, type of sport, and instrument related technology" when setting its triggers for Hb Concentration, Reticulocyte % and OFF-Score, as WADA does not make the inner workings of its Adaptive Model public. It is not my understanding that the trigger values are set using these parameters, but instead sets such values only based on, initially, population norms and then later, as the profile grows, athlete specific norms."*\*

\*The Tribunal need not evaluate this reservation since both parties' experts are in agreement that the ABP is at least a useful tool in the detection of blood doping and that in any particular case, particular facts will determine the extent of its utility.

15. The athlete becomes his/her own point of reference and each time a blood sample is recorded, the Adaptive Model calculates where the reported HGB, RET% and OFF-score values fall within the athlete's expected distribution. After each new test, a new range of expected results for the athlete is determined.

16. The IAAF formally introduced ABP to its blood testing programme in 2009. It implements that programme through a procedure designed to afford the athlete due process in establishing whether the anti-doping regulations have been violated and in essence, in accordance with para 8.8 - 8.35 of the ADR the procedures consist of four steps, namely:

- (i) an assessment by the Adaptive Model to determine whether the athlete's blood profile is normal or abnormal;
- (ii) if it is abnormal, an analysis of the athlete's ABP, together with other relevant information (e.g. whereabouts information and competition schedule) by three scientific experts who do not know the athlete's identity;
- (iii) an opportunity for the athlete to challenge the expert's conclusions if the experts find indications of prohibited doping; and
- (iv) the initiation of disciplinary proceedings against the athlete if the expert panel, upon consideration of the record (including the athlete's submissions) unanimously confirms its position that it is likely that the athlete had used a Prohibited Substance or Prohibited Method and it is highly unlikely that the profile is the result of any other cause.

17. The Tribunal notes and confirms that each of these steps was duly performed in the present case.

## E. INITIAL REVIEW BY THE EXPERT PANEL

18. From 23 June 2016 to 24 October 2018, the IAAF collected eighteen (18) ABP blood samples from the Athlete.

19. Each of the samples was analysed by a WADA-accredited laboratory and logged in ADAMS using the Adaptive Model.

20. A summary table of the Athlete's ABP, showing the Athlete's HGB, RET% and OFF-scores for the fifteen (15) valid samples<sup>3</sup> is set out below:

No.	Date of Sample	HGB (g/dL)	RET%	OFF-score
1.	23 June 2016	14.9	1.08	86.60
2.	24 June 2016	15.7	0.99	97.30
3.	21 July 2016	14.7	1.05	85.50
4.	30 August 2016	15.0	1.47	77.30
5.	28 October 2016	14.9	1.40	78.00
6.	30 November 2016	14.8	1.50	74.50
8.	9 February 2017	14.7	1.28	79.10
10.	3 September 2017	14.6	1.03	85.10
11.	18 October 2017	15.3	0.91	95.80
12.	22 January 2018	14.3	1.03	82.10
13.	5 February 2018	14.7	1.19	81.50
14.	20 May 2018	16.5	1.69	87.00
15.	31 May 2018	18.0	1.37	109.80
16.	9 June 2018	16.5	1.06	103.20

<sup>3</sup> Sample 7 and Sample 9 were deemed invalid and Sample 18 was excluded from the profile in accordance with the WADA regulations because it was evidenced from the temperature logger report that the sample had been transported at a temperature below 0°C for 2 hours on 25<sup>th</sup> October 2018 from 16:30 to 18:30.

No.	Date of Sample	HGB (g/dL)	RET%	OFF-score
17.	21 June 2018	16.2	0.96	103.20

21. The Athlete's ABP was submitted to a panel of experts ("the Expert Panel") for review on an anonymous basis.

22. The Expert Panel examined the Athlete's ABP (which was anonymised and identified by the code "BP35KOK5") and produced a joint opinion undated (the "First Expert Panel Joint Opinion").

23. The Expert Panel noted that there were several "*abnormalities*" at both 99% and 99.9% specificity. The First Expert Panel Joint Opinion stated:

"[...] the profile was flagged with a sequence abnormality for the haemoglobin concentration (Hb) at the 99.9% specificity level. In addition, the Hb in Sample 14 and the OFF-score in Sample 15 exceeded the upper 99% specificity level. Further, the Hb in Sample 15 exceeded the upper 99.9% specificity level".

24. In its qualitative assessment of the ABP profile, the Expert Panel focussed in particular on Samples 14, 15 and 16, noting the variation in blood parameters around the time of the Athlete's exposure to altitude as part of his training programme in Karakol, Kyrgyzstan between 2 April 2018 and 6 June 2018. The First Expert Panel Joint Opinion described the abnormalities in the following terms:

"During this period two out of competition tests were conducted. The first (Sample 14) collected on the 20<sup>th</sup> of May 2018, after 46 days of altitude exposure; and the second (Sample 15) on the 31<sup>st</sup> of May 2018, after 57 days of altitude exposure. Compared to the previous samples, Sample 14 showed an elevated Hb of 16.5g/dL and an elevated percentage of reticulocytes (%ret) of 1.69, increased from 14.7g/dL and 1.19% in Sample 13, respectively. The extended sojourn at moderate altitude could explain the increased Hb and ret% values at that point. Nevertheless, during the additional 11-day period from Sample 14 to Sample 15 there was a further increase in Hb of 1.5g/dL resulting



in an extremely high Hb of 18g/dL and accompanied by a small decrease in %ret to 1.37%. Such a further increase in Hb after such a long exposure to altitude is very abnormal. In addition, a total increase of 3.3g/dL<sup>4</sup> even after this hypoxic dose is extreme. Therefore, both the time course and magnitude of the erythropoietic response to altitude is highly abnormal. Sample 16 was obtained 9 days later on the 9<sup>th</sup> June 2018. According to the competition schedule, the collection of this sample coincided with the athlete competing in a 50km race. At this point the Hb and %ret were lower than the previous (Sample 15), but still markedly elevated compared to other samples collected at sea level. Whilst a modest drop in %ret was observed (1.37 to 1.06%), a markedly larger drop in %ret is expected upon removal of the altitude stimulus, particularly after a hypoxic dose of this magnitude (2500m for 65 days)<sup>1</sup>. The observed pattern of an increased bone marrow stimulation evidence by a high %ret and an additionally very high Hb (ON-phase)<sup>2</sup> shortly before a competition is a typical haematological response to the administration of an erythropoiesis-stimulating agent (ESA) e.g. erythropoietin”.

25. The First Expert Panel Joint Opinion concluded that:

“it is our unanimous opinion that, in the absence of an appropriate physiological explanation, the likelihood of observing the described abnormalities assuming blood manipulation, namely the artificial increase of red cell mass using for example ESAs, is high. On the contrary, the likelihood of environmental factors or a medical condition causing the described pattern is low”.

and

“[...] that it is highly likely that a prohibited substance or prohibited method has been used and that it is unlikely that the passport is the result of any other cause”.

## **F. THE ATHLETE’S EXPLANATION FOR HIS ABNORMAL ABP PROFILE**

26. On 19 February 2019, the AIU wrote to the Athlete on behalf of the IAAF notifying him of the abnormalities detected in his ABP profile and advising him that the AIU was

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<sup>4</sup> from Sample 13 to Sample 15

considering bringing charges against him. The Athlete was invited to provide explanations for the abnormalities before 5 March 2019 and was informed that any explanations would be sent to the Expert Panel for review before any charges were brought.

27. On 4 March 2019, the Athlete duly sent an e-mail to the AIU enclosing his explanation (the "Athlete Explanation") including that:

- (i) the increase in HGB values in Sample 15 collected on 31 May 2018 (whilst he was on vacation) was explained by a cessation of training for a period of 10 days prior to sample collection, necessitated by a knee injury ("Cessation of Activity due to Training")<sup>5</sup>;
- (ii) the increase in HGB in Sample 15 was also explained by an intra-articular injection of a corticosteroid "Ciprospan" to treat the knee injury (Intra-articular injection of the glucocorticoid "Ciprospan"); and
- (iii) Since 2011 he had a clean record in terms of his urine samples ("Clean record").

#### **G. REVIEW OF THE ATHLETE'S EXPLANATION BY THE EXPERT PANEL**

28. On 27 March 2019, the Expert Panel issued a joint report that considered and dismissed the explanations provided by the Athlete in the Athlete's Explanation (the "Second Expert Panel Joint Opinion").

29. In relation to each of the explanations provided by the Athlete, the Expert Panel concluded as follows:

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<sup>5</sup> He also says that he began training again closer to his next competition on 9 June 2018, which explains the similar results in Samples 14 and 16.

### **i) Cessation of Activity due to Injury**

a. The Athlete's assertion that his training had been close to competitive in mileage and speed at the time of Sample 14<sup>6</sup> rendered that value more (rather than less) abnormal. Increased training load/exercise results in acute fluid losses, which are overcompensated by fluid shifts towards the intravascular space, resulting in increased plasma volume and hence decreased HGB. The Expert Panel noted that *"[...] in studies where athletes have increased their work load at altitude, the haematological effect has been a decrease (not an increase) in Hb (2)."* ("The First New Point").

b. The Athlete's explanation of reduced workload for the increase in HGB of 1.5g/dL between Sample 14 and Sample 15 had to be rejected. Whereas plasma contraction consequent to a decreased training load can result in an increase of HGB back to "baseline" levels, it could not explain an increase of this magnitude and to a level of 18 g/dL.

c. Further, significant decrease in activity, including that caused by injury, typically results in a pronounced reduction in HGB mass that would outweigh any increase in HGB concentration due to plasma contraction, resulting in a net decrease in HGB.

d. RET% is usually suppressed during periods of intense exercise whereas the Athlete's ABP exhibited the opposite pattern of a higher RET% during intense training (Sample 14) and lower RET% during a period of rest from injury (Sample 15) ("The Second New Point").

e. The Second Expert Panel Joint Opinion concluded with the following words *"Therefore, the observed changes from Sample 14 to Sample 15 are not compatible with the provided explanation of changes in work load due to injury."*

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<sup>6</sup> The proper interpretation of the Athlete's words was debated. See below.

## **ii) Intra-articular injection of the glucocorticoid Ciprospan<sup>7</sup>**

There was a lack of any supporting medical evidence corroborating the Athlete's injury or his asserted treatment<sup>8</sup>, but in any event the explanation that an intra-articular injection of Ciprospan could have resulted in the increase in HGB in Sample 15 had to be rejected because:

"Although it has been shown in asthmatic children that consecutive, long-term administration of glucocorticoids has the potential to increase Hb and haematocrit (9), there is no evidence in the scientific literature supporting the argument that a single intra-articular (local) injection of "Ciprospan" would induce an even modest increase in Hb in healthy subjects. Local administration of glucocorticoids e.g. an intra-articular injection of a normal dosage does not result in systemic effects thereby neglecting any hypothetical effects on erythropoiesis (10)."

## **iii) Clean record**

The negative testing history of the Athlete was irrelevant since the negative urine tests do not preclude the administration of a prohibited substance such as an ESA.

## **iv) Generally**

The Second Expert Panel Joint Opinion confirmed the First Expert Panel Joint Opinion in the following terms (while adding, as noted above, two new points):

### **"Conclusion**

Therefore, considering the points raised in the document 'Explanation BPID BP35KOK5', we confirm our previous opinion that features of the profile, especially the pattern observed in Sample 14 and 15, are typical of blood doping e.g. the use of an erythropoiesis-stimulating agent. On the other hand, we find it highly unlikely that the profile is the result of analytical or confounding factors such as altitude exposure, tapering or medication."

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<sup>7</sup> Also called "Diprospan"

<sup>8</sup> While this was substantially correct it was not completely so. See below

## H. ATHLETE'S ANSWER AND EXHIBITS

30. On 29 June 2019, Mr Howard Jacobs, on behalf of the Athlete, filed the Athlete's Answer Brief<sup>9</sup> and Exhibits including a Witness Statement from the Athlete ("the Athlete Statement") and an Expert Report from Mr Paul Scott dated 28<sup>th</sup> June 2019 (the "Athlete Expert's Report").

31. The Athlete submitted in the Athlete Statement that he had:

- a. trained at an altitude of approximately 2500m as from 2 April to 6 June 2018; and
- b. sustained a knee injury after 21 May 2018 and had stopped training, but had remained at altitude in Karakol, including on 31<sup>st</sup> May 2018 when he provided a blood sample (Sample 15).

32. The Athlete Expert's Report accepted that the Athlete's ABP was possibly explained by the use of a Prohibited Substance and accepted that the *"Hb concentration in Sample 15 is very unusual and that the combined increase from Sample 13 to Sample 15 is on the extreme end"* (para 10). However, the Athlete Expert's Report suggested that it was also *"possible"* that the abnormalities could be explained by prolonged exposure to altitude combined with training and rest due to injury (para 14).

33. The Athlete Expert's Report took particular issue with The Second New Point. It asserted that the Expert Panel's conclusions regarding the decrease in RET% between Sample 14 (collected during a period of heavy training) and Sample 15 (collected after a period of rest) being contrary to the expected response were not supported by the literature cited.<sup>10</sup> In particular, whereas the Schumacher article demonstrated that the average RET% had reduced by 0.1% due to prolonged exercise, a reduction occurred in just over half of the subjects of the study and the RET% change between

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<sup>9</sup> The Answer Brief paras 2.6 - 2.13 emphasised that Mr Scott may not have had all the material that in an ideal world he would have liked to have had. However, no submission was made at the hearing that the Athlete had been denied a fair opportunity to deal with the charges and the Tribunal, which on two occasions extended the time for this Answer and also encouraged provision of some of that material through the good offices of the AIU, is satisfied that due process was observed.

<sup>10</sup> Schumacher, Y.O. et al. "Reticulocytes in athletes: Longitudinal aspects and the influence of long- and short-term exercise". Drug Test and Analysis 2010 Oct; 2(10): 469-74 ("the Schumacher article")

competition and rest ranged from -0.9% to +0.6% across all subjects such that the decrease in RET% (1.69%) from Sample 14 to Sample 15 (1.37%) i.e. 0.32% was “reasonably within the data” contained in the article (para 14).

34. The Athlete Expert’s Report further asserted that the paper cited to demonstrate that a cessation of activity consequent upon injury reduces HGB was not relevant to the Athlete’s individual circumstances<sup>11</sup>, given that the subject of the paper was a female endurance athlete who suffered a severe fracture resulting in loss of blood and requiring surgical repair (paras 32-34).

35. The Athlete Expert’s Report also submitted that Sample 13 no longer served as a relevant or useful comparison with Sample 14 for the purposes of the Athlete’s ABP since it had been collected over 3 months previously (paras 36-41).

## **I. FURTHER EXPERT PANEL JOINT OPINION**

36. On 19 July 2019, the AIU received a response from the Expert Panel in reply to the Athlete Expert’s Report (“the Further Expert Panel Joint Opinion”).

37. The Further Expert Panel Joint Opinion rejected the arguments made in the Athlete Expert’s Report and made the following points:

a. The Athlete Expert’s Report does not engage with the main points set out in the First Expert Panel Joint Opinion, notably (i) the high HGB and RET% in Sample 14 (taking account of the Athlete’s heavy workload at that time), (ii) the high HGB in Sample 15, and (iii) the increase in HGB concentration from Sample 14 to sample 15, but rather, focusses on two subsidiary issues from the Second Expert Panel Joint Opinion i.e.:

- (i) that the decrease in RET% between Samples 14 and 15 in connection with a cessation of activity was contrary to the literature i.e. The Second New Point; and

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<sup>11</sup>Schumacher, Y.O. et al. “Hemoglobin Mass in an elite endurance athlete before, during and after-injury related immobility”. Clin J Sport Med. 2008 Mar; 18(2): 172-3

(ii) that a period of injury-induced rest will lead to a reduction of HGB mass.

b. As to (i), the Expert Panel, while accepting the range of variations described in the Schumacher article, provided further references to support their position that the movement in RET% and HGB concentration between Samples 14 and 15 were atypical.

c. As to (ii), the Expert Panel, while accepting that the female endurance athlete's case differed from that of the Athlete, whose injury caused neither trauma nor blood loss, referred to other literature which showed that a decrease in Hb mass has also been reported in athletes undertaking modified training due to injury.

d. Although there is not a sample immediately prior to the altitude sojourn (but rather several months before), it is nonetheless reasonable (in view of the relative lack of variation in HGB in the early part of the Athlete's passport) to take the two prior HGB values – being Samples 12 and 13 with values of 14.3 and 14.7 – for the purposes of comparison. Relative to Sample 13, there is an increase in HGB concentration of >12% (to Sample 14) and >22% (to Sample 15), which exceeds any physiological response to altitude.

e. Moreover, the extremely high value of 18 g/dL<sup>12</sup> in Sample 15 cannot be explained by a contraction of the plasma volume consequent to an alleged cessation of activity; the effect would not be of this magnitude and, in any event, the concomitant increase in HGB concentration when plasma contracts will only ever return HGB back to baseline levels.

f. The value of 18 g/dL becomes all the more abnormal since it likely understates the Athlete's true HGB value at this time: firstly, Sample 15 was taken in the evening<sup>13</sup> when HGB values should be lower according to diurnal variation; secondly, the

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<sup>12</sup> This value exceeds the highest HGB concentration in the passport of the Athlete that led to him being convicted of blood doping and sanctioned for three years and two months (see CAS 2015/A/4007)

<sup>13</sup> see the Doping Control Form ("DCF")

Athlete's urine when he provided Sample 15 was heavily diluted (SG 1.006), indicating haemodilution (which would lower HGB as a concentration-based value).<sup>14</sup>

38. The Expert Panel therefore confirmed its unanimous conclusion that the likelihood of observing the described abnormalities assuming blood manipulation by the artificial increase of red cell mass with, for example, ESAs, was very high and that, on the contrary, the likelihood of environmental factors or a medical condition causing the described condition is low.

## **J. HEARING**

39. The hearing was held at the Novotel Hotel, Monte Carlo on 23 July 2019 before the Tribunal, composed of Michael J Beloff QC (Chair), Professor Moni Wekesa and Dr Anna Bordiugova, assisted by Matt Berry of Sport Resolutions.

40. The following were heard as witnesses: the Athlete, Mr Paul Scott for the Athlete, Ms Laura Garvican-Lewis (one of the Expert Panel members) and Professor Giuseppe D'Onofrio for the IAAF. The AIU team also included Mr Tony Jackson (AIU's Case Manager) and Ms Laura Gallo (AIU's Results Management Co-ordinator). The Tribunal benefitted from able submissions by two advocates, experienced in the field, Mr Howard Jacobs for the Athlete and Mr Ross Wenzel for the AIU.

## **K. ANALYSIS**

41. The Tribunal accepts that it cannot conclude that the Athlete was guilty of blood doping merely:

(i) because so many Russian athletes have been found to have committed ADRVs. His case demands individual attention and the evidence to be considered must relate to him;<sup>15</sup>

(ii) because he has trained with and indeed been trained by persons found to have committed ADRVs. There is no legal principle of guilt by association;

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<sup>14</sup> see the laboratory documentation

<sup>15</sup> Legkov v FIS (CAS 2018/A/4968) at para 195



(iii) because he has been found guilty previously of blood doping. Some found guilty of ADRVs have repeated the offence. Others found guilty of ADRVs have not. There can be no presumption either way.

42. However, the Tribunal cannot ignore the Athlete's adamant refusal to accept that the CAS finding that he had previously committed an ADRV had been well founded, as illustrated by his witness statement that he had *"never knowingly taken any banned substance or used any prohibited method"*.

43. The Tribunal notes that under the IAAF Disciplinary Tribunal Rules para 12.5 *"Facts established by decision of a court or tribunal of competent jurisdiction that is not the subject of an appeal shall be binding save where it is demonstrated that the decision violated principles of natural justice"*.

44. The CAS Panel which considered the Athlete's case CAS 2015/A/4007 (in the context of a decision as to which of his results should be disqualified in consequence of his first ADRV) used - it would appear quite deliberately-pungent language. *"In other words, the Athlete's case is not the "unfortunate" case of an athlete, who inadvertently ingested a contaminated product, or of an athlete whose degree of fault is light, or even of a cheater on a single occasion, but of an athlete, who put in place a careful scheme to avoid detection of the prohibited substances or methods he was using, but still gain the advantage of his unlawful practice"* (para 122(i)).

45. The Athlete's explanation that he did not appeal the underlying finding of his ADRV by the Russian Anti-Doping Agency because that might have exposed him to the possibility that the process or outcome of reviewing his case might be to deny him the chance to participate in the Rio Olympics 2016 had some plausibility but could not itself excuse his persistent proclamation of his innocence.

46. The Athlete's associated suggestion that in 2011 he had been the victim of medical malpractice and in receipt of injections from random syringes which contained, contrary to his belief, prohibited substances struck the Tribunal as wholly unconvincing and wholly inconsistent with the binding CAS finding.

47. The Tribunal was accordingly sceptical of the Athlete's credibility and could give little, if any, weight to his bare assertion that in 2018 he was scrupulous to ensure that he did not fall foul of the ADR.

48. The Tribunal was further disinclined to believe that the Athlete's two explanations in his letter of March 4 2019 were the product of spontaneous consideration unaffected by outside advice. It would seem far more likely that, faced with the threat of charges contained in the AIU letter of February 25 2019, he would seek assistance in ascertaining whether there was a version of events which could provide an antidote to any inference of an ADRV drawn from his ABP. Indeed, the Athlete accepted that he had been advised, albeit, he says informally that his use of Ciprospan could have affected his HGB. It defies common sense to conclude that he would not have made a more general inquiry. His claim that he did not need to make such inquiry because he was aware of the fact that reduction of training could result in increase in HGB based on his own earlier experience derived from earlier years - dating back to 2011 - was neither credible, nor corroborated.

49. It does not of course follow that those explanations, even if the product of outside advice, were unsustainable. It is to this key issue that the Tribunal now turns.

50. In doping cases it is often chemistry, not law, which determines the outcome and this is, in the Tribunal's opinion, one such case.

51. It is now well settled in CAS cases that the ABP model is a reliable means of establishing blood doping, i.e. the use of a Prohibited Substance or Prohibited Method (see paragraph 13 of *Kokkinariou CAS 2012/A/2773*: "*Systems which make use of these longitudinal profiles have evolved to become widespread and highly effective means of detecting EPO doping*"). In *CAS 2014/A/3614 & 3561 IAAF & WADA v/ RFEA & Ms. Marta Dominguez ("Dominguez")*, the Panel stated that it was "*convinced that the ABP Model is a reliable and a valid mean of establishing an ADRV.*" The Panel also noted that "*numerous peer-reviewed publications<sup>16</sup> have confirmed the ABP's reliability*" (see paras. 278 and 279). The same was confirmed

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<sup>16</sup> the word actually used was applications but, it would appear, by inadvertent and unedited error

by CAS 2016/O/4464 IAAF v/ ARAF & Sharmina; CAS 2016/O/4463 IAAF v/ ARAF & Ugarova; CAS 2016/O/4469 IAAF v/ ARAF & Chernova & CAS 2016/O/4481 IAAF v/ ARAF & Savinova-Farnosova. In CAS 2018/O/5822 IAAF v. RUSAF & Mariya Ponomareva, in para 86 it was stated: *"In a preliminary finding, the Sole Arbitrator accepts that the ABP is a reliable and accepted means of evidence to assist in establishing an anti-doping rule violation and feels comforted in this conclusion by CAS jurisprudence"*.

52. The Tribunal derives the same comfort, as the Sole Arbitrator in the case last cited, from the CAS jurisprudence and is not prepared to reject the wisdom of its predecessors. Indeed, Mr Jacobs did not challenge the validity of the ABP as a means of detecting an ADRV but sought rather to argue that the Athlete's case had to be considered and could be distinguished on its particular facts, while emphasising (correctly) that there is no physical or eye witness evidence of any wrongdoing on the Athlete's part, nor any Prohibited Substances found in his samples.

53. Turning to the data in the Athlete's ABP, Mr Scott made no criticism either of the standing of the testing laboratory (WADA accredited as it was) or of the actual tests carried out as illustrated in the laboratory documentation. Insofar as there was scope for inherent error, he estimated that its effect would have been of the order of +/- 0.1 g/dL i.e. in the overall context nugatory. In point of fact the laboratory documentation shows that the actuals were close to the target figures - itself an indication of their accuracy.

54. Blood Sample 15 appears from the Laboratory documentation to have been diluted (as were the related urine samples) and because of the time when it was taken, i.e. in the evening, was, as already noted, lower than it would have been earlier in the day. The Tribunal need not and will not speculate as to whether the dilution was the result of the Athlete seeking to mask the use of a Prohibited Method. It can however - and does - recognize that the 18 HGB figure was, if anything, understated, but that otherwise there is no reason to reject or even qualify the figures in the summary table set out at para. 20 above which described the Athlete's ABP.

55. In the Tribunal's view, accordingly, the Athlete's ABP profile constitutes *prima facie* evidence that the Athlete has committed an anti-doping rule violation in breach of Article 2.2 of the ADR. In particular:

- (i) The Athlete's passport was considered "blindly" by three independent experts from different but related disciplines; they did not know who the Athlete was and they did not know each other's opinions when they first opined that the Athlete's ABP constituted likely evidence of doping.
- (ii) The Expert Panel has unanimously confirmed its view of likely doping on two occasions, i.e. both after the Athlete Explanation and after the Athlete's Answer.
- (iii) Professor D'Onofrio, who had not provided a proof of his evidence in advance was permitted to pronounce on one issue only - in fairness to the Athlete, the depressive effect of cessation of training on HGB in which he was *ad idem* with the Expert Panel.

56. After careful reading of the Expert Reports and with the advantage of hearing and seeing<sup>17</sup> both - one of its authors<sup>18</sup> and Professor D'Onofrio - the Tribunal is generally<sup>19</sup> disposed to prefer their evidence to that of Mr Scott not simply by a crude head count, showing that they outnumbered him 4-1, but by the cogency and detail of their own analysis.

57. Moreover Mr Scott with candour was constrained on the basis of the material available to him, both in terms of the literature and the Athlete's version of events, consistently to deploy the vocabulary of possibility rather than of likelihood, more appropriate to a "beyond reasonable doubt" standard than one of "comfortable satisfaction". Indeed, his overall approach was to seek to undermine the conclusions of the Expert Panel rather than to advance a compelling positive case. The Tribunal quotes the following indicative passage from his Expert Report:

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<sup>17</sup> Albeit by video rather than face to face.

<sup>18</sup> The other two were on vacation and unavailable.

<sup>19</sup> Where it does not wholly accept it, it so states below with explanation for its caution.

"It is possible that a prohibited substance or method was used and that this explains some of the variation seen in the Athlete's ABP (particularly between Samples 14 and 15). It is also possible that some or all of this could be explained by the combination of prolonged exposure to altitude, training and rest due to injury. I have reached no conclusion regarding this specific combination nor as to the contribution, if any, of the localised injection of the corticosteroid" (para 14).

To put it another way he raised questions rather than supplying answers.

58. From a quantitative perspective the Tribunal finds that the Athlete's Passport is more than merely abnormal. It contains outliers at both 99% and even 99.9%. Notably, as stated in the Further Expert Panel Joint Opinion, the HGB value of 18g/dL in Sample 15 is an outlier at a specificity of 99.99% (i.e. 1 in 10,000) according to the Adaptive Model.

59. The conclusions drawn by the Expert Panel from a qualitative perspective fortify, in the Tribunal's view, those drawn from a quantitative perspective:

- a. The HGB and RET% values in Samples 14 and 15 are not consistent – in terms of both timing and magnitude - with a mere physiological response to altitude;
- b. The movement of HGB and RET% from Samples 14 to 15 is contrary to what would be expected based on the Athlete's shifts in workload (from quasi-competitive levels to all but total inactivity consequent upon injury); and
- c. The extreme HGB value of 18 g/dL cannot be explained by plasma contraction, which can only ever lead to a return to baseline levels.

60. The Tribunal next considers the forensic criticism made of the Expert Panel. As noted the Expert Panel which had in its first report been prepared benignly to concede that the elevation of HGB in Sample 14 "*could*" have been the product of training at altitude, in the second report withdrew that concession on the basis that the Athlete's

explanation suggested a degree of training which would have counteracted the effect of altitude.

61. The Athlete's exact words were *"I am an athlete who specializes in 50km race walking. 50km is a very difficult distance and in order to remain in the lead I have to train constantly overcoming great distances. For example, on 5/20/2018, my training was close to competitive in mileage and speed (this is indicated on the doping control protocol)."*

62. Mr Jacobs suggested that the Expert Panel had misinterpreted those sentences as meaning that the Athlete would not have had, as would be usual, periods of rest interspersed with severe sessions. The Athlete was not himself recalled to deal in detail with this issue of how hard and consistently he trained at altitude and the Tribunal is at least sympathetic to the interpretation given by the Expert Panel and would note that, insofar as the Athlete suffered an injury, the detail of which was also never explored, that would at any rate be consistent with, certainly not at odds, strenuous preparation for the hardest endurance event in the athletics calendar. Furthermore, even if the Expert Panel had in good faith drawn a conclusion based on an erroneous understanding of the actual facts, this was on a secondary, not the primary factor underlying the charge against the Athlete.

63. Mr Jacobs submitted further that the Expert Panel's change of position, in particular on the significance or lack thereof of Sample 14, viewed in isolation, undermined confidence in their collective conclusion. The Tribunal rejects any implication - and to be fair none was suggested - that the Expert Panel had any motive to inculcate an athlete of whose identity, the Tribunal repeats, its members were originally unaware.

64. The Tribunal recognizes that there is always a risk that an expert (like any other human being) who has taken up a position on an issue may be psychologically predisposed to adhere to it but in the context of the present case they see no evidence that the Expert Panel succumbed to that temptation. As the famous economist John Maynard Keynes once said, *"When the facts change, I change my mind..."*.

65. On another equally secondary factor the Tribunal acknowledges that there was some force in Mr Scott's point that the Expert Panel gave more weight to a seminal

article by Professor Schumacher on the impact of cessation of training on RET% levels than it deserved. Fairly read Professor Schumacher identified a range of reactions, not a uniform increase. There was equal force in Mr Scott's point that no read across to the Athlete's case in terms of loss of Hb mass from injury could be made from the case of a female athlete whose circumstances, including blood loss, could not be equated to his. But in the Expert Panel's Second Joint Opinion, as Ms Laura Garvican-Lewis emphasised orally, there was other persuasive peer reviewed literature that supported the general points made in those contexts by the Expert Panel. The limit of Mr Scott's criticism appeared to be that a particular paper did not support a particular point; not that there was no paper which supported it, and certainly not that there was a paper (or more than one) which actually contradicted it. Mr Scott could produce no literature to support his theory that a cessation of training would lead to an increase in HGB levels of the kind shown between Samples 14 and 15. Nor had he himself carried out any experimentation. In this he was at a disadvantage compared with Professor D'Onofrio, a clinical haematologist, who had personal research experience of the impact of cessation of training, notably among off-season footballers and cyclists, on haemoglobin levels, which showed an increase only back to base level after exposure to altitude for such a long period of time (65 days in this case), and not above it.

66. The sequence of the Athlete's samples from 23 June 2016 to 5 February 2018 itself illustrated that the figure of 18g/dL in Sample 15 was far above the average for the Athlete, and indeed of the highest level previously recorded in a sample, number 2 of 24<sup>th</sup> June 2016. In that context the Tribunal found marginal the point made (true as it was in point of fact) that there was a gap in the sample table between Sample 13 and Sample 14. The anomalous nature of Samples 14 and 15 had to be assessed not against Sample 13 only but against earlier samples spanning almost two years

67. In the Tribunal's view the Athlete's Expert both in his Report and in his oral testimony failed to engage with the key abnormalities in the passport and, in particular, with respect to the extreme HGB value in Sample 15.

68. Mr Scott criticises the fact that the WADA rules require ABPs to be based on the first of the two analytical results, but whatever the force of that criticism in other



cases, it has none in this particular case where the second analytical result is either identical to, if not adverse, to the Athlete's case.

69. Other matters relied on by the AIU had less resonance. The AIU made much of the fact that the Athlete's unqualified assertion both in his explanation and his statement that:

- (i) he was training at altitude from the start of April to (subject to (ii)) the end of May 2018 ("the long period"), and
- (ii) he did not train at all from 20 May 2018 (the date of Sample 14) to 31<sup>st</sup> May 2018 (the date of Sample 15) ("the short period") was inaccurate (and the AIU suggested, even deliberately so).

70. The Tribunal accepts that both versions, consistent with each other could have been more nuanced. The true position, in their judgement was as set out below.

71. The Tribunal accepts that the Athlete was not permanently at 2500m (as he contends in his Answer) and did not entirely cease training during the 10 days prior to the collection of Sample 15 on 31 May 2018.

72. The Athlete's whereabouts information coupled with information from social media shows that the Athlete:

- a. was at the monument of Przhevalsky on 5<sup>th</sup> April (altitude 1700-1750m), but the Tribunal accepts en route to his altitude training;
- b. visited Kyzart (which is some 325 km from Karakol) on 25<sup>th</sup> April 2018 (altitude 1200 - 1300m);
- c. visited Kyrgyz "seaside resort" (which is some 130 km from Karakol) on 10 May (altitude 1600-1650m), but the Tribunal accepts that the Instagram postdates the actual visit which preceded the altitude training, and;
- d. visited Bishkek (which is some 400 km from Karakol) on 27<sup>th</sup>-28<sup>th</sup> May 2018 (altitude 700-850m).



73. The same whereabouts information also was said by the AIU to evidence

- (i) that the Athlete was in fact training in the period between 20<sup>th</sup> May 2018 and 31 May 2018

corroborated by:

- (ii) photos and videos posted on *inter alia* Instagram on 25 May 2018 of the Athlete training (albeit with strapping on his knee).

74. As to para. 73(i) - on 14 May 2018, the Athlete entered a training slot into his whereabouts for the period from 15 May to 6 June 2018; the slot was every day except Thursdays from 16:00-17:00 and the indicated location was the Mamansk highway (altitude 1700-1750m). When the Athlete updated his Whereabouts on 27<sup>th</sup> May 2018 to take account of his overnight trip to Bishkek on 27 -28 May 2018, he deleted his scheduled training on the Mamansk highway for 28 May but not for 29 - 30 May. Moreover, the Athlete never deleted or amended the training sessions scheduled in his Whereabouts for *inter alia* 20 - 23 and 25 - 27 or 29 - 30 May 2018. However, the Tribunal is prepared to accept the Athlete's explanation that, while not himself training on those days, in consequence of his injury he was assisting in training others and was at the location indicated.

75. As to para. 73(ii) - there is no doubt that on 25 May 2018 the Athlete was indeed training; the camera cannot lie. But he was clearly carrying some form of injury - hence the strapping on his left knee - as was proven by his later use of Ciprospan discussed below. It is therefore entirely plausible, absent any contrary evidence, that for most, if not all, the shorter period he was "*off games*".

76. Although the Tribunal concludes that:

- (i) the Athlete was from time to time during the long period referred at a lower altitude than 2400m; and
- (ii) the Athlete did train at any rate on a single day during the short period,

both of which factors might enhance the conclusions otherwise drawn by the Expert Panel, it did not appear to the Tribunal that it would do so to any significant extent.

77. Furthermore whereas there was no evidence to corroborate the Athlete's claim that he sustained an injury (strapping apart) before the start of the short period it does appear at least that he did have an injection of Ciprospan as declared on his doping control form on 31 May 2018. Academic literature suggests that Ciprospan would or could have curative effects on a knee joint problem.

78. However the issue as to whether and why the Athlete used Ciprospan is again peripheral. The highest Mr Scott could put whether it was explanatory of the high levels of HGB in Sample 15 was *"I can point to no evidence that the inter-articular injection of Ciprospan contributed to changes in the Athlete's haematological parameters<sup>20</sup>, but I cannot point to evidence rejecting the proposition either"* (para 66).

79. In the Tribunal's view an absence of evidence on a matter cannot be converted by some intellectual alchemy into actual evidence. It is no more than unsupported speculation<sup>21</sup>.

80. To draw these various threads together it was common ground that the blood sample profile of the Athlete did not reflect the roller coaster curves of the profiles of some proven blood dopers of the past (Mr Wenzel used the sea monster and McDonald's logo as analogies). But the absence of any precedent of such kind does not, indeed cannot, itself mean that the charge against the Athlete is not made out. His case has to be judged on its own facts.

81. The starting point is that the figures in Sample 15 were, in Mr Scott's own language, extreme. They required explanation. The legal burden is always on the AIU to prove its case; but the extremity of the figures shifted the evidential burden.

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<sup>20</sup> Miss Laura Garvican-Lewis agreed that there were no academic studies on whether it might have the effect contended for by the Athlete

<sup>21</sup> There is also no evidence that a combination of permitted substances such as folic acid and vitamins also disclosed on the DCFs for 20 and 31 May 2018 could have the effect of increasing the substantial uplift in HGB levels. The contrary was not even mooted by Mr Scott.

82. From first to last the Athlete relied on three explanations:

- (i) Altitude training in the longer period;
- (ii) Injection of Ciprospan; and
- (iii) Cessation of training in the shorter period.

83. For the reasons set out above neither singly nor in combination do they provide an acceptable explanation as to why the ABP does not prove blood manipulation and the Tribunal is comfortably satisfied that the ABP profile of the Athlete constitutes reliable evidence of blood doping for the reasons (with all the qualifications the Tribunal itself has referred to) advanced by the Expert Panel reports and the AIU witnesses.

84. That conclusion is not impaired by two further matters raised in evidence or argument. It was common ground between the experts that the Athlete's clean record since 2011 was not a factor to be weighed in his favour. In doping, as in other things, there is a first (or in the Athlete's case a second) time for everything. Nor does the Athlete's statement that the Russian Championships held on the 9<sup>th</sup> June 2018 were unimportant to him hence he had no reason to blood dope. The Tribunal is, under the ADR, not concerned with motive - though the fact that a competition was imminent is consistent with such motivated manipulation.

## **L. CONSEQUENCES FOR THE ANTI-DOPING RULE VIOLATION**

### **I. Period of Ineligibility**

85. Article 10.2 of the ADR provides the consequences to be imposed for Anti-Doping Rule Violations under Article 2.2 as follows:

#### **10.2 Ineligibility for Presence, Use or Attempted Use, or Possession of a Prohibited Substance or Prohibited Method**

The period of Ineligibility to be imposed for an Anti-Doping Rule Violation under Article 2.1, 2.2 or 2.6 that is the Athlete or other Person's first anti-doping rule violation shall be as follows, subject to potential reduction or suspension pursuant to Article 10.4, 10.5 or 10.6:

10.2.1 The period of Ineligibility shall be four years where:

- (a) The Anti-Doping Rule Violation does not involve a Specified Substance, unless the Athlete or other Person can establish that the Anti-Doping Rule Violation was not intentional.

86. The period of Ineligibility shall therefore be four years in circumstances where the Anti-Doping Rule Violation is intentional and constitutes an athlete's first violation of the ADR.

87. The Athlete has failed - indeed not sought - to meet his burden to establish that his violation, if proven, was not intentional<sup>22</sup>. He would therefore be subject to the mandatory period of Ineligibility of four years in accordance with Article 10.2.1(a) of the ADR.

88. However, the Athlete has previously committed an anti-doping rule violation in 2011 for abnormalities in his ABP for which he has served a period of Ineligibility of three years and two months from 24 December 2012 to 23 February 2016. The abnormalities in the Athlete's profile set out above therefore constitute the Athlete's second Anti-Doping Rule Violation.

89. Consequently, the Athlete must be subject to a period of Ineligibility by operation of Article 10.7.1 of the ADR resulting in a period of Ineligibility of eight (8) years in accordance with Article 10.7.1(c).

## **II. Disqualification of Results and Other Consequences**

90. The first evidence of an ADRV in the ABP profile of the Athlete is, on the Tribunal's finding, in Sample 14 (collected on 20 May 2018).

91. Pursuant to Article 10.8 of the ADR, any competitive results obtained by the Athlete between this date and the date of his provisional suspension on 3 April 2019 shall be disqualified with all resulting consequences, including the forfeiture of any

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<sup>22</sup> In any event, the AIU rightly submits that blood manipulation is necessarily intentional.

medals, titles, ranking points and prize and appearance money (unless the Disciplinary Tribunal determines that fairness requires otherwise<sup>23</sup>).

## **M. ORDER**

92. For the foregoing reasons the Tribunal:

- (i) rules that the Tribunal has jurisdiction to decide on the subject matter of this dispute;
- (ii) finds that the Athlete has committed an anti-doping rule violation pursuant to Article 2.2 of the ADR for abnormalities in his ABP;
- (iii) imposes a period of Ineligibility of eight (8) years upon the Athlete for this, his second anti-doping rule violation, commencing on the date of the Tribunal's Award;
- (iv) gives credit for the period of provisional suspension imposed on the Athlete from 3 April 2019 until the date of the Tribunal's Award against the total period of Ineligibility, provided that it has been effectively served by the Athlete;
- (v) orders the disqualification of any results obtained by the Athlete between 20<sup>th</sup> May 2018 and 4 April 2019 with all resulting consequences including the forfeiture of any titles, awards, medals, points and prize and appearance money pursuant to Article 10.8 of the ADR, and;
- (vi) awards the IAAF a contribution towards its legal costs of USD100 only given that its decision has effectively deprived the Athlete of his ability to earn money by race walking.

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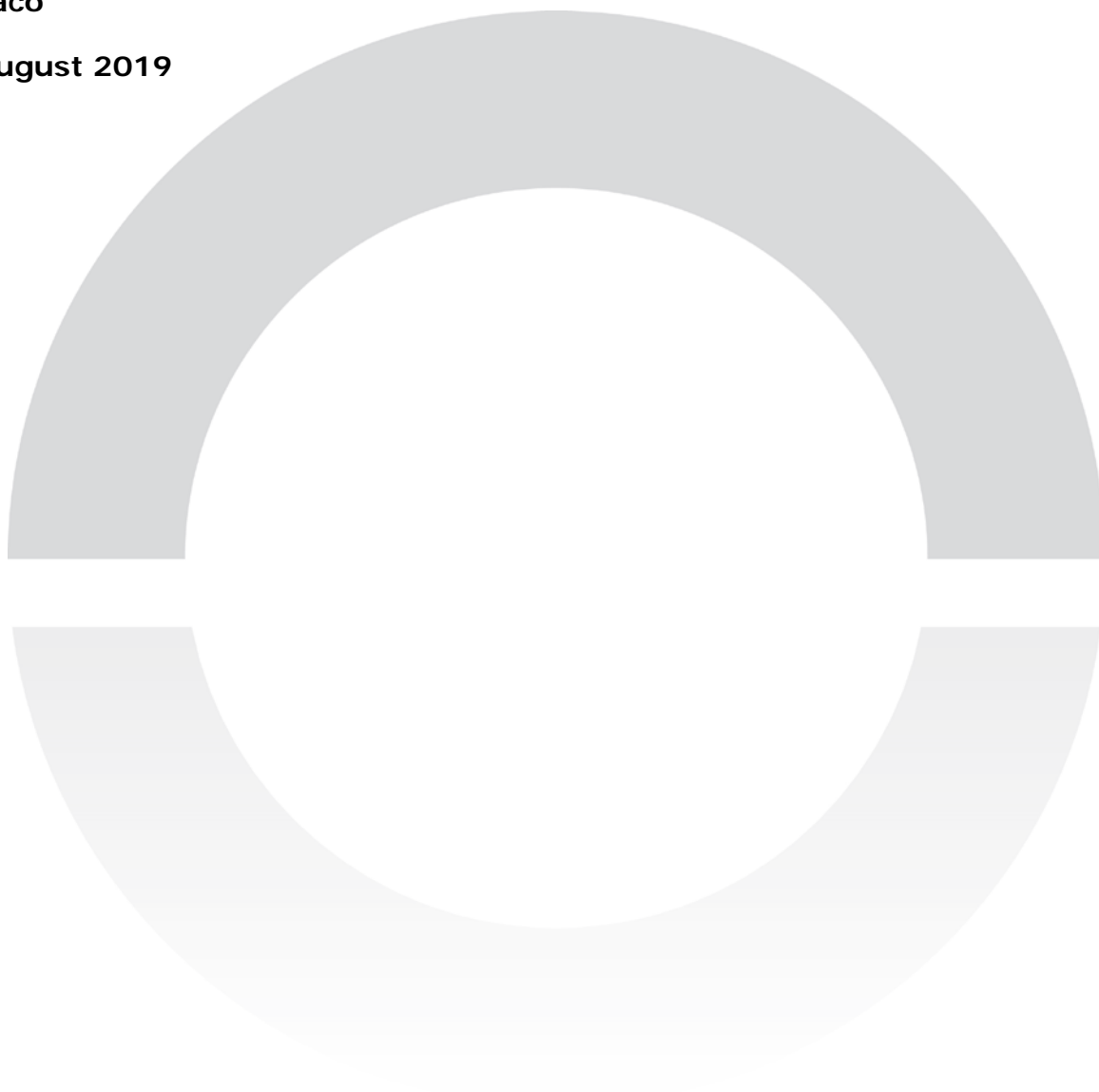
<sup>23</sup> The AIU has discretion (and the Tribunal has discretion where fairness requires) to establish an instalment plan for repayment of prize money forfeited pursuant to the above and/or for payment of any costs awarded by the Tribunal. The AIU has reserved its rights in full in that respect.

*Michael J Beloff QC*

**Michael J Beloff QC (Chair on behalf of the Panel)**

**Monaco**

**14 August 2019**





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