



Arbitration CAS 2016/O/4463 International Association of Athletics Federations (IAAF) v. All Russia Athletics Federation (ARAF) & Kristina Ugarova, award of 29 November 2016

Panel: Prof. Michael Geistlinger (Austria), Sole Arbitrator

Athletics (Middle distance)

Doping (Athlete's Biological Passport, ABP)

CAS Jurisdiction according to Article 38.3 IAAF Competition Rules

Increased red blood cell mass, altitude and diarrhea

Increased HGB levels and mental stress

Establishment of an anti-doping rule violation by means of an ABP

Determination of the applicable sanction and number of abnormal samples in an ABP

Aggravating circumstances

Disqualification of results in case of a violation found by reference to the ABP

Application of the principle of proportionality with regard to disqualification of results

- 1. In circumstances where an IAAF member federation is prevented from convening and completing a hearing within the deadline set by Rule 38.3 of the IAAF Competition Rules (the "IAAF Rules"), e.g. because it is suspended from IAAF activities, the IAAF is permitted to refer the matter directly to a sole arbitrator appointed by CAS, subject to an appeal to CAS in accordance with Rule 42 of the IAAF Rules. In case of such referral it is Rule 38.3 of the IAAF Rules that establishes the jurisdiction of CAS.**
- 2. An athlete seeking to explain the abnormal blood values in one of his Athlete Biological Profile (ABP) samples by training/residing at high altitude or dehydration due to diarrhea needs to submit conclusive evidence in this respect, supported by unanimous opinions of experts in the field.**
- 3. Whereas it is potentially possible that mental stress increases HGB levels, an athlete seeking to rely on stress as cause for his increased HGB levels needs to establish that the stress had occurred prior to the taking of the blood samples showing increased HGB levels. Furthermore it cannot be lightly accepted that an athlete encountered a significant level of stress because of participating in a major international competition; otherwise any athlete confronted with abnormal blood values could potentially use this argument in bad faith.**
- 4. Abnormal values in the ABP of an athlete for which he cannot provide a credible explanation do not on their own allow the conclusion that an anti-doping rule violation has been committed. Rather, the deviations in the ABP are to be interpreted by experts, called to examine various hypothesis that could explain the abnormality in the profile values; i.e. a distinction is made between a "quantitative" and a "qualitative" assessment of the evidence. Specifically, the inference to be drawn from abnormal blood**

values is enhanced where the ascertainment of such values occurs at a time when the athlete in question could benefit from blood manipulation, *i.e.* if the levels coincidence with the athlete's racing schedule. In conclusion, to find that an athlete has committed an anti-doping rule violation the panel needs to be convinced that the abnormal values are caused by a "doping scenario", which does not necessarily derive from the quantitative information provided by the ABP, but rather from a qualitative interpretation of the experts and possible further evidence.

5. The number of abnormal samples establishing an anti-doping rule violation in the framework of an ABP profile, without any further argument, cannot be considered as a starting point for discussing any reduction of the regular sanction. Specifically, in case an ABP only contains one abnormal sample, in order for the regular sanction to be reduced the athlete in question *e.g.* would have to establish that the abnormal blood values in the sample were caused by circumstances for which the athlete bore no significant fault or negligence.
6. In order to find aggravating circumstances under the IAAF Rules which would mandate an increase of the "standard" period of ineligibility of two years, supporting evidence of the factors justifying increase needs to be adduced. Furthermore, no provision in the IAAF Rules indicates that an anti-doping rule violation proven by means of the ABP, *per se*, justifies a higher sanction than the presence of a prohibited substance.
7. The provisions of the IAAF Rules regarding disqualification of results are geared to the situation where the violation is an occurrence rather than a process, most obviously where the violation is the presence of a prohibited substance. If an anti-doping rule violation is established on the basis of an ABP, the complicating factor is that it normally does not determine when the violation was committed exactly, but rather that based on all the evidence available it must be concluded that a violation was committed during a certain period. In those circumstances it has to be determined which element of the case can be most appropriately equated to a positive sample (*e.g.* a single sample of the athlete's ABP) in order to decide the date decisive for the commencement of the disqualification of the athlete's results.
8. The 2016-2017 IAAF Rules regarding disqualification of results (Rule 40.9) differ from the 2012-2013 IAAF Rules (Rule 40.8) as the former regulations include a fairness exception ("unless fairness requires otherwise"), whereas the latter – read literally – do not. Considering however that Article 10.8 of the WADA Code 2009 included the fairness exception, that this provision was part of the obligatory commitment of the IAAF as signatory to the WADA Code according to Article 23.2.2 WADA Code and that the IAAF was not allowed to include any substantial change to this provision, the fairness exception has to be read into Rule 40.8 2012-2013 IAAF Rules, read together with Articles 10.8 and 23.2.2 WADA Code.

I. PARTIES

1. The International Association of Athletics Federations (the “Claimant” or the “IAAF”) is the world governing body for the sport of Athletics, established for an indefinite period with legal status as an association under the laws of Monaco. The IAAF has its registered seat in Monaco.
2. The All Russia Athletics Federation (the “First Respondent” or the “ARAF”) is the national governing body for the sport of Athletics in the Russian Federation, with its registered seat in Moscow, Russian Federation. The ARAF is a member federation of the IAAF, currently suspended from membership.
3. Ms Kristina Ugarova (the “Second Respondent” or the “Athlete”) is a Russian athlete specialising in middle distance events (800 metres to 1,500 metres). The Athlete is an International-Level Athlete for the purposes of the IAAF Competition Rules (the “IAAF Rules”).

II. FACTUAL BACKGROUND

4. Below is a summary of the main relevant facts, as established on the basis of the parties’ written and oral submissions and the evidence examined in the course of the present arbitration proceedings and during the hearing. This background is set out for the sole purpose of providing a synopsis of the matter in dispute. Additional facts may be set out, where relevant, in connection with the legal discussion that follows. While the Sole Arbitrator has considered all the facts, allegations, legal arguments and evidence submitted by the parties in the present proceedings, he refers in his Award only to the submissions and evidence he considers necessary to explain his reasoning.
5. The Athlete has been charged with violating Rule 32.2(b) of the IAAF Rules: *“Use or Attempted Use by an Athlete of a Prohibited Substance or a Prohibited Method”*.
6. The evidence of the Athlete’s alleged anti-doping rule violation in the matter at hand is based on a longitudinal analysis of her Athlete Biological Passport (the “ABP”) and allegedly involves prohibited blood doping since 26 June 2012.
7. From 8 March 2012 until 20 January 2013, the IAAF collected 5 ABP blood samples from the Athlete. Each of the samples was analysed by a laboratory accredited by the World Anti-Doping Agency (“WADA”) and logged in the Anti-doping Administration & Management System (“ADAMS”) using the Adaptive Model, a statistical model that calculates whether the reported HGB (haemoglobin concentration), RET% (percentage of immature red blood cells – reticulocytes) and OFF-score (a combination of HGB and RET%) values fall within an athlete’s expected distribution.
8. The registered values for HGB, RET% and OFF-score in the Athlete’s respective samples are as follows:

No.	Date of Sample	HBG (g/dL)	RET%	OFF-score
1.	08 March 2012	15.40	1.33	84.80
2.	26 June 2012	16.50	0.16 ¹	141.00
3.	12 October 2012	12.50	1.62	48.60
4.	27 November 2012	14.30	1.21	77.00
5.	20 January 2013	13,1	1.14	66.90

9. On 14 July 2015, three experts with knowledge in the field of clinical haematology (diagnosis of blood pathological conditions), laboratory medicine and haematology (assessment of quality control data, analytical and biological variability and instrument calibration) and sports medicine and exercise physiology: Prof. Giuseppe d’Onofrio, Dr. Yorck Olaf Schumacher and Prof. Michel Audran (the “Expert Panel”) analysed the Athlete’s ABP on an anonymous basis and concluded 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”* (the “First Joint Expert Opinion”).
10. On 7 August 2015, the IAAF Anti-Doping Administrator informed the ARAF that the IAAF was considering bringing charges against the Athlete but that such charges would not be brought until she had been given the opportunity to provide an explanation for the alleged abnormalities.
11. On 20 August 2015, the Athlete sent an email to the IAAF providing explanations for the alleged abnormalities in her ABP profile. The Athlete argued that the abnormalities could be explained by 1) stress caused by a divorce and legal proceedings regarding the custody of her child; 2) dehydration due to diarrhea; and 3) her menstrual cycle.
12. On 27 August 2015, the Expert Panel issued a joint report (the “Second Joint Expert Opinion”), in which the Athlete’s explanations were considered, concluding that *“[b]ased on scientific scrutiny of the different points forwarded by the athlete, we do not think that any of the arguments explain the abnormalities of the profile”* and that *“[c]onsidering the information available at this stage, we therefore confirm our previous opinion that this profile is highly suspicious for blood manipulation. It is highly unlikely that it is the result of a normal physiological or pathological condition but might in contrast be caused by the use of prohibited substances or prohibited methods”*.
13. On 7 September 2015, the IAAF notified ARAF of the alleged anti-doping rule violation of the Athlete, her immediate provisional suspension and her right to request a hearing.
14. On 18 September 2015, the Russian Anti-Doping Authority (“RUSADA”) forwarded an email to the IAAF, attaching a communication from the Athlete in which she expressed the wish for a hearing in her case.
15. On 12 January 2016, the IAAF informed the Athlete that ARAF’s membership from the IAAF had been suspended, that it took over the responsibility for coordinating the disciplinary

¹ According to the First Expert Opinion, the value of 0,2% should in fact have been used. However, the difference is immaterial.

proceedings and that her case would be referred to the Court of Arbitration for Sport (“CAS”). The Athlete was offered to choose between the following two procedures:

- (1) *“before a sole CAS Arbitrator sitting as a first instance hearing panel pursuant to IAAF Rule 38.3. The case will be prosecuted by the IAAF and the decision will be subject to an appeal to CAS in accordance with Rule 42; or*
- (2) *before a CAS Panel as a single hearing, with the agreement of WADA and any other anti-doping organisation with a right of appeal, in accordance with Rule 38.19. The decision rendered will not be subject to an appeal”.*

16. On 25 January 2016, the Athlete informed the IAAF that *“we choose the first option, with right of appeal”*.

III. PROCEEDINGS BEFORE THE COURT OF ARBITRATION FOR SPORT

17. On 22 February 2016, the IAAF lodged a Request for Arbitration with CAS in accordance with Article R38 of the CAS Code of Sports-related Arbitration (2016 edition) (“CAS Code”). The IAAF informed CAS that its Request for Arbitration was to be considered as its Statement of Appeal and Appeal Brief and requested the matter to be submitted to a sole arbitrator. This document contained a statement of the facts and legal arguments and included the following requests for relief:

- (i) *CAS has jurisdiction to decide on the subject matter of this dispute.*
- (ii) *The Request for Arbitration of the IAAF is admissible.*
- (iii) *The Athlete be found guilty of an anti-doping rule violation in accordance with Rule 32.2(b) of the IAAF Rules.*
- (iv) *A period of ineligibility of between two and four years be imposed upon the Athlete, commencing on the date of the (final) CAS Award. Any period of ineligibility or provisional suspension effectively served by the Athlete before the entry into force of the CAS award shall be credited against the total period of ineligibility to be served.*
- (v) *All competitive results obtained by the Athlete from 26 June 2012, through to the commencement of her provisional suspension on 7 September 2015, shall be disqualified, with all resulting consequences (including forfeiture of any titles, awards, medals, profits, prizes and appearance money).*
- (vi) *The arbitration costs be borne entirely by the Respondents.*
- (vii) *The IAAF is awarded a contribution to its legal costs”.*

18. On 25 February 2016, the CAS Court Office initiated the present arbitration and specified that, as requested by the Claimant, it had been assigned to the CAS Ordinary Arbitration Division but would be dealt with according to the Appeals Arbitration Division rules. The Respondents were further invited to submit their Answer.

19. On 31 March 2016, the ARAF requested the IAAF to clarify why the ARAF was involved in this case as a Respondent, not as a witness, and what types of relief are sought by the IAAF against the ARAF.
20. On 11 April 2016, the IAAF informed the CAS Court Office that CAS is effectively acting as a substitute for the ARAF because of the ARAF's inability to conduct disciplinary proceedings in Russia in due time and that the IAAF Rules clearly contemplate that, in these circumstances, the costs of those proceedings will be borne by the ARAF. The IAAF therefore maintained its requests for relief against the ARAF.
21. On 26 April 2016, the Athlete informed the CAS Court Office that she was represented by *pro bono* counsel, who requested a short (ten days) stay of the proceedings to have the opportunity to review the file in more detail, which was agreed upon by the IAAF.
22. On 29 April 2016, in accordance with Article R54 of the CAS Code, and on behalf of the President of the CAS Ordinary Arbitration Division, the CAS Court Office informed the parties that the arbitral tribunal appointed to decide the present matter was constituted by:
 - Dr. Hans Nater, Attorney-at-Law in Zurich, Switzerland.
23. On 17 May 2016 and further to a challenge of the Sole Arbitrator filed by the Second Respondent, Dr. Nater decided to resign from the present case in order to avoid any delay in this arbitration procedure.
24. On 19 May 2016, the Athlete informed the CAS Court Office that she had attempted to retain an expert willing to testify as to their professional opinion regarding the blood testing and collection of the samples in question, but that an additional request for financial aid was required for this to be facilitated.
25. On the same day, the Athlete contacted the IAAF directly and requested it to produce the Laboratory Documentation Packages for the tests of the Athlete in the period 2011 – 2016, including three specified sample numbers, as well as further explanations by RUSADA and the IAAF.
26. On 23 May 2016, the IAAF objected to producing the requested documentation considering it late and ill-motivated. The IAAF also argued that it is unusual for a party to make a production request directly to the other party.
27. On 24 May 2016, in accordance with Article R54 of the CAS Code, and on behalf of the President of the CAS Ordinary Arbitration Division, the CAS Court Office informed the parties that the arbitral tribunal appointed to decide the present matter was constituted by:
 - Prof. Dr. Michael Geistlinger, Professor in Salzburg, Austria.
28. The parties were further informed that Mr Dennis Koolaard would act as *Ad hoc* Clerk.

29. On 30 May 2016 and within the relevant time-limit, the Athlete filed her Answer in accordance with Article R55 of the CAS Code. The Athlete submitted the following requests for relief:
- a. *“The anti-doping rule violation as to Samples 2 and 3 is voided;*
 - b. *The Second Respondent be awarded a substantial contribution towards her costs and attorney’s fees;*
 - c. *If it is found that an anti-doping rule violation has occurred, the period of ineligibility shall be two years; and*
 - d. *The Second Respondent is provided with such other relief that the Sole Arbitrator deems just, equitable, and lawful”.*
30. Also on 30 May 2016, the Athlete filed a request for production of documents with the CAS Court Office, pursuant to Article R44.3 of the CAS Code. More specifically, the Athlete requested the Sole Arbitrator to order the IAAF to produce the following documents:
- 1) *“Copies of full package of documents connected with the blood analysis of Kristina Ugarova for the period from 2011 to 2016, including samples number **797810** and **798257**.*
 - 2) *Explanations of RUSADA/LAAF regarding the records in the Athlete’s Biological Passport (ABP) in respect to the blood samples number **798257** and **797810** (for each sample separately):*
 - 2.1. *The grounds for taking and analyzing the sample;*
 - 2.2. *The date, place and time of taking the sample;*
 - 2.3. *The name and position of the employee that took the sample;*
 - 2.4. *The date of recording the sample in the ABP, specifying the name and position of the RUSADA employee who created the record;*
 - 2.5. *The date of changing the record in the ABP concerning the sample analysis, specifying the name and position of the RUSADA employee who made the changes;*
 - 2.6. *The reasons for, the grounds and the list of changes made in the ABP as a result of the record renewal.*
 - 3) *Explanations by RUSADA of the reasons for drawing and analyzing the sample **797810** in light of the sample **798257**.*
 - 4) *Explanations by RUSADA employee that changed the record in the ABP concerning the samples **798257** and **797810** (if such were made), indicating the reasons for, the grounds and the list of introduced changes”.*
31. On 6 June 2016, the CAS Secretary General addressed the Athlete’s additional request for legal aid and informed the parties that the ICAS Board would examine such request, once such additional evidence will have been 1) more precisely identified and 2) admitted by the Sole Arbitrator as being relevant and admissible.
32. On 7 June 2016, the IAAF provided its position in respect of the Athlete’s procedural requests:

- 1) *“The IAAF has produced the documentation packages and certificates of analysis with respect to all the samples of the ABP. In particular, the documentation package for sample 3 is already in the file (Exhibit 4).*

In any event, documentation packages are only mandatory for those tests that are deemed essential by the Athlete Passport Management Unit and the Expert Panel (ABP Operating Guidelines, Appendix E, Comment to point 5).

- 2) *With respect to the samples in the ABP, most of the information sought is already on the Doping Control Forms, which are in the file (Exhibit 4).*

The background information regarding the Further Sample is not within the IAAF’s knowledge or control. In any event, requests 2.4 to 2.6 are difficult to understand but appear to be directed at RUSADA.

- 3) *The background information regarding the Further Sample is not within the IAAF’s knowledge or control. As the IAAF has mentioned, two samples were collected separately by two independent ADOs on the same date.*

- 4) *The request is unclear. In any event, the information is not within the IAAF’s knowledge or control”.*

33. On 8 June 2016, the Athlete requested the Sole Arbitrator to rule that expert testimony would be admitted as relevant evidence in this matter and clarified that such expert testimony would provide further information on the Athlete’s results in her ABP and would give his professional opinion on the significance of the Athlete’s ABP, and of the procedure used to analyse the results.
34. On 10 June 2016, the CAS Court Office informed the parties that the Sole Arbitrator had decided to dismiss the Athlete’s evidentiary requests of 30 May 2016, as far as not already fulfilled by the IAAF, who had provided the Athlete with the requested Laboratory Documentation Packages, and provided certain explanations. In addition, the parties were also informed that the Sole Arbitrator had decided that an additional expert witness testimony of the Athlete was considered relevant and would be admitted to the CAS file provided that it would be submitted within the time-limit that would be granted to the Athlete to complete her Answer.
35. On 15 June 2016, the IAAF voluntarily produced the Athlete’s ABP profile with the two RUSADA Samples (including Sample 3A).
36. On 24 June 2016, the Athlete was given the opportunity to complete her written submission by 16 July 2016 but finally did not complete her Answer or file an expert report.
37. On 25 and 29 August 2016 respectively, the IAAF and the Athlete returned duly signed copies of the Order of Procedure to the CAS Court Office. The ARAF failed to return a duly signed copy of the Order of Procedure.

38. On 6 September 2016, a hearing was held in Lausanne, Switzerland. At the outset of the hearing, all parties confirmed that they had no objection to the constitution and composition of the arbitral tribunal.

39. In addition to the Sole Arbitrator, Ms Pauline Pellaux, Counsel to the CAS, and Mr Dennis Koolaard, *Ad hoc* Clerk, the following persons attended the hearing:

For the IAAF:

- Mr Ross Wenzel, Counsel.

For the Athlete:

- Ms Kristina Ugarova, the Athlete, by video conference;
- Mr Gorsha Sur, Counsel;
- Ms Jennifer Yuen, Counsel, by video-conference.

40. The Sole Arbitrator heard evidence of the following persons:

- Dr. York Olaf Schumacher, expert in sports medicine, expert witness called by the IAAF, by telephone conference;
- Prof. Giuseppe d'Onofrio, expert haematologist, expert witness called by the IAAF, by telephone conference.

41. Both expert witnesses were invited by the Sole Arbitrator to tell the truth subject to the sanctions of perjury. All parties and the Sole Arbitrator had the opportunity to examine and cross-examine the expert witnesses.

42. The parties were afforded ample opportunity to present their case, submit their arguments and answer the questions posed by the Sole Arbitrator.

43. Before the hearing was concluded, all parties expressly stated that they did not have any objection with the procedure adopted by the Sole Arbitrator and that their right to be heard had been respected.

44. The Sole Arbitrator confirms that he carefully took into account in his decision all of the submissions, evidence, and arguments presented by the parties, even if they have not been specifically summarised or referred to in the present arbitral award.

IV. SUBMISSIONS OF THE PARTIES

45. The IAAF's submissions, in essence, may be summarised as follows:

- The IAAF's case is that the Athlete's ABP profile constitutes clear evidence that the Athlete has committed an anti-doping rule violation in breach of Rule 32.2(b) of the IAAF Rules as follows:
 - The ABP sequence is abnormal for HGB, RET% and OFF-score with a probability in excess of 99.9%.
 - The Athlete's ABP profile contains individual "outliers" for all three blood markers. An outlier on the upper or lower limit is abnormal with a probability of 99.9% (*i.e.* 1 in 10,000) and an outlier over or under the limit is abnormal with an even higher degree of certainty.
 - The overall variation in HGB of 32% from 12.5 g/dL to 16.5 g/dL is further evidence of blood manipulation, *a fortiori* when one considers that these two extreme values arose within only three and a half months of each other (between Samples 2 and 3).
 - Sample 2 from 26 June 2012 is a clear example of an OFF-phase. HGB is 16.5 g/dL and RET% is only 0.16, producing an extreme OFF-score of 141.00. As explained by the Expert Panel, these values are symptomatic of the use and discontinuation of an erythropoietic stimulating agent ("ESA") in order to artificially boost red cell mass during competition. Unsurprisingly, this sample was taken only several days before the Athlete competed in the 1,500 metres event at the European Athletics Championships in Helsinki on 30 June and 1 July 2012.
 - Sample 3, taken only several months after Sample 2 on 12 October 2012, presents diametrically opposed values. HGB has fallen to 12.5 g/dL and RET% has increased tenfold to 1.62. The high RET% and low HGB are indicative of blood manipulation, *e.g.* a withdrawal of blood.
- In view of the foregoing and, in particular, on the basis of the First Joint Expert Opinion and the Second Joint Expert Opinion, the IAAF submits that the ABP profile of the Athlete constitutes reliable evidence of blood doping, in particular in 2012.
- The IAAF further relies on the findings of the WADA Independent Commission in its report dated 9 November 2015. Based on the Athlete's conversations in 2014, the WADA Independent Commission found that the Athlete was part of an organised and sophisticated doping system and was herself engaged in doping practices.
- As to the period of ineligibility, the IAAF maintains that Rule 40.6 of the IAAF Rules may be applied in order to increase the period of ineligibility up to a maximum of a four-year period of ineligibility due to aggravating circumstances, as the evidence indicates that the Athlete (i) used a prohibited substance or a prohibited method on multiple occasions and (ii) engaged in a doping plan or scheme.

- The IAAF submits that the Sole Arbitrator should impose a period of ineligibility of between two and four years pursuant to the 2012 IAAF Rules. The IAAF submits that the sanction should not be at the lower end of that spectrum.
 - The IAAF submits that in accordance with Rule 40.10 of the IAAF Rules, the period of ineligibility should commence on the date of the (final) CAS award.
 - Finally, the IAAF submits that, unless the Athlete accepts that her anti-doping rule violation(s) may be sanctioned entirely in accordance with the 2016 IAAF Rules (*i.e.* including with respect to the applicable period of ineligibility), all her results from 26 June 2012 (*i.e.* the date Sample 2 was taken) until her provisional suspension on 7 September 2015 shall be disqualified, together with the forfeiture of any prizes, medals, prize money and appearance money etc.
46. Although duly invited, the ARAF did not submit any position on the merits of the present proceedings.
47. The Athlete's submissions, in essence, may be summarised as follows:
- The Athlete maintains that the analysis of her ABP is questionable at best due to its reliance on an unidentified sample population. Second, the Athlete's "abnormal" test results can be explained by naturally occurring physiological changes in the human body due to training and living at high altitudes.
 - According to the Athlete, scientific literature suggests that it is very likely that the Adaptive Model used in the analysis of the ABP does not adequately account for physiological variations, which could lead to a false-positive. Based upon the evidence presented by the IAAF, and upon the Athlete's sworn declaration, it is very probable that a false positive occurred in this case.
 - The Athlete submits that, despite of what the IAAF might want the Sole Arbitrator to believe, the record contains evidence of only one alleged violation of the Athlete's ABP profile. This alleged violation concerns Sample 2.
 - The allegedly abnormal results in Sample 2 can be explained due to the fact that she had been training in high altitude and might have had an internal inflammation or flu as evidenced by the bout of diarrhea she suffered in Helsinki. The Athlete spent about six weeks living and training in high altitude leading up to the 26 June 2012 test and maintains that athletes that have recently returned from acute sojourn at altitude are found to be more at risk of exceeding normal cut-off thresholds for OFF models. The Athlete submits that the values of Sample 2 are consistent with research conducted on altitude training and, more particularly, with the abnormal values of two cyclists, demonstrating a pattern of higher HGB levels, lower RET%, and higher OFF-scores typical of an extended high altitude training. These factors, together or separately, could be a major factor in explaining why the OFF-score levels in Sample 2 were exceeded.

- The Athlete argues that the IAAF does not allege that Sample 3 amounts to a doping violation. The facts of the case make clear that the circumstances leading up to Sample 1, 2 and 3 were significantly different. The first two tests were in-competition, when the Athlete was at a near peak of her training. Before Sample 3 was taken, the Athlete spent four months idling at sea level which could have led to the adjustment of her relevant scores to off-season numbers.
- The Athlete further maintains that it appears that an additional sample was collected from the Athlete on the same day Sample 3 was collected. However, both samples show different results and the Athlete seeks explanations from the IAAF in this respect. The other sample taken on that day is comparable to the levels of Sample 4 and Sample 5, that were deemed normal by the Expert Panel.
- The Athlete maintains that there are no aggravating circumstances present in this case and that the sanction, if any, should therefore be limited to a two year period of ineligibility. There is no evidence that a prohibited substance or prohibited method was used on multiple occasions and there is no evidence of a doping plan or scheme. Should any aggravating circumstances be found, the Athlete, with reference to CAS jurisprudence, maintains that the increase in the period of ineligibility should not be significant.

V. JURISDICTION

48. The IAAF maintains that the jurisdiction of CAS derives from Rule 38.3 of the 2016-2017 IAAF Rules. As a consequence of its suspension, the ARAF was not in a position to conduct the hearing process in the Athlete's case by way of delegated authority from the IAAF pursuant to Rule 38 of the IAAF Rules. In these circumstances, it is plainly not necessary for the IAAF to impose any deadline on the ARAF for that purpose. The Athlete also expressly consented to the application of Rule 38.3 of the IAAF Rules.
49. Rule 38.3 of the IAAF Rules determines as follows:

"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

of 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”.

50. The Sole Arbitrator notes that the Athlete is an International-Level Athlete and that the ARAF is indeed prevented from conducting a hearing in the Athlete’s case within the deadline set by Rule 38.3 of the IAAF Rules. The Sole Arbitrator confirms that IAAF was therefore permitted to refer the matter directly to a sole arbitrator appointed by CAS, subject to an appeal to CAS in accordance with Rule 42 of the IAAF Rules. The IAAF and the Athlete also confirmed the jurisdiction of CAS based on this Rule by having signed the Order of Procedure.
51. It follows that CAS has jurisdiction to adjudicate and decide on the present matter and that the present case shall be dealt with according to the Appeals Arbitration rules.

VI. APPLICABLE LAW

52. The IAAF maintains that the procedural aspects of these proceedings shall be subject to the 2016-2017 edition of the IAAF Rules and the substantive aspects of the asserted anti-doping rule violations shall be governed by the 2012-2013 edition of the IAAF Rules, being in force at the time of the alleged violations, and subject to the possible application of the principle of *lex mitior*. To the extent that the IAAF Rules do not deal with a relevant issue, Monegasque law shall apply (on a subsidiary basis) to such issue.
53. The ARAF did not put forward any specific position in respect of the applicable law. The Athlete referred in her submissions to the 2012-2013 edition of the IAAF Rules and confirmed the application of the 2012-2013 edition of the IAAF Rules at the hearing.
54. Article R58 of the Code provides as follows:

“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”.
55. The Sole Arbitrator observes that it is not disputed that the proceedings are primarily governed by the IAAF Rules.
56. Pursuant to the legal principle of *tempus regit actum*, the Sole Arbitrator is satisfied that procedural matters are governed by the regulations in force at the time of the procedural act in question. As such, whereas the substantive issues are governed by the 2012-2013 edition of the IAAF Rules, procedural matters are governed by the 2016-2017 version of the IAAF Rules.

VII. MERITS

A. The Main Issues

57. As a result of the above, the main issues to be resolved by the Sole Arbitrator are:

- i. Did the Athlete violate Rule 32.2(b) of the 2012-2013 IAAF Rules?
 - a) Can the blood values of Sample 2 be explained by training/residing at high altitude and/or dehydration due to diarrhea?
 - b) Can the blood values of Sample 2 and 3 be explained by mental stress?
 - c) Is it relevant for the proceedings at hand that another sample was taken from the Athlete on the day Sample 3 was taken?
 - d) Conclusion
- ii. If so, what sanction shall be imposed on the Athlete?

i) Did the Athlete violate Rule 32.2(b) of the 2012- 2013 IAAF Rules?

58. The Sole Arbitrator observes that the following general regulatory framework is relevant as to the merits of the case at hand.

59. The relevant parts of Rule 32 of the 2012-2013 IAAF Rules read as follows:

“RULE 32 Anti-Doping Rule Violations

1. *Doping is defined as the occurrence of one or more of the anti-doping rule violations set out in Rule 32.2 of these Anti-Doping Rules.*
2. *Athletes or other Persons shall be responsible for knowing what constitutes an anti-doping rule violation and the substances and methods which have been included on the Prohibited List. The following constitute anti-doping rule violations:*

[...]

(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”.*

60. Rules 33(1), (2) and (3) of the 2012-2013 IAAF Rules read as follows:

“RULE 33 Proof of Doping

1. *The IAAF, 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, 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.*
2. *Where these Anti-Doping Rules place the burden of proof upon the Athlete or other Person alleged to have committed an anti-doping violation to rebut a presumption or establish specified facts or circumstances, the standard of proof shall be by a balance of probability, except as provided in Rules 40.4 (Specified Substances) and 40.6 (aggravating circumstances) where the Athlete must satisfy a higher burden of proof.*

Methods of Establishing Facts and Presumptions

3. *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, expert reports, documentary evidence, conclusions drawn from longitudinal profiling such as the Athlete Biological Passport and other analytic information”.*
61. The Sole Arbitrator observes that in its attempt to establish an anti-doping rule violation of the Athlete under IAAF Rule 32.2(b), the IAAF relies on conclusions drawn from longitudinal profiling as shown by the Athlete’s ABP. The IAAF focusses on an abnormal sequence in HGB, RET% and OFF-score values in the Athlete’s ABP with a probability in excess of 99.9%, and two Joint Expert Opinions, supported by the statements and explanations given by Prof. d’Onofrio and Dr. Schumacher at the hearing.
 62. In the First Joint Expert Opinion, the following conclusion was reached by the Expert Panel:

“In summary, the constellation of high haemoglobin, low reticulocytes and high OFF-score values of sample 2 is unlikely consequent to any physiological or even pathological condition. On the contrary, it is highly likely assuming blood manipulation aimed at increasing circulating red blood cell mass.

We therefore conclude 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”.
 63. After having been provided with the Athlete’s email dated 20 August 2015 with explanations for the alleged abnormalities in her ABP, the Expert Panel concluded as follows in the Second Joint Expert Opinion:

“Based on scientific scrutiny of the different points forwarded by the athlete, we do not think that any of the arguments explain the abnormalities of the profile. The most suspicious point highlighted in our previous expertise, namely the OFF scenario observed at the 2012 European Championships remains unexplained.

In contrast to the explanations provided by the athlete, it is typical to observe features such as seen in the profile assuming blood manipulation, notably an artificial increase in red cell mass for the 2012 European Championships.

Considering the information available at this stage, we therefore confirm our previous opinion that this profile is highly suspicious for blood manipulation. It is highly unlikely that it is the result of a normal physiological or pathological condition but might in contrast be caused by the use of prohibited substances or prohibited methods”.

64. The Athlete, in her Answer, puts forward different explanations for the alleged abnormal values in her ABP as she did in her email dated 20 August 2015. The Athlete submitted in her Answer that her alleged abnormal results may have been caused by training and residing at high altitude. She also considered the discussion on the effects of menstrual bleeding on her ABP “irrelevant” because Sample 4 and 5 were not considered to be abnormal. The Athlete did not specifically declare that she no longer relied on her argument regarding stress, but rather that the combination of extensive travel, altitude training and competitions caused significant stress on her immune system and overall health. She got prone to contamination by flu and stomach viruses, causing infection and diarrhea. As such, the Sole Arbitrator understands that, according to the Athlete, stress affected her immune system and eventually resulted in infections and diarrhea, but that the stress itself did not cause deviations in her blood values. The different explanations invoked by the Athlete will be dealt with in more detail below.
- a) *Can the blood values of Sample 2 be explained by training/ residing at high altitude and/or dehydration due to diarrhea?*
65. The Athlete argues that she attended a training camp near the city of Kislovodsk between 13 May and 20 June 2012 (*i.e.* about six weeks) prior to the collection of Sample 2 (26 June 2012). The Athlete descended to sea level two times during this period, being quick in-and-out trips to compete in regional competitions in Moscow (on 12 and 21 June 2012 respectively). After both competitions she immediately returned to Kislovodsk.
66. The Athlete refers to certain studies conducted on the effects of altitude on blood values and concludes that there is supporting evidence that the ABP does not adequately account for altitude training as it does not account for how training at various altitudes can affect HGB readings, as well as the time required for the HGB levels to return back to normal.
67. The Athlete submits that the values of Sample 2 are consistent with the abnormal values of two cyclists in a scientific study (ASHENDEN M. J. *et al*, Effects of altitude on second-generation blood tests to detect erythropoietin abuse by athletes, *Haematology/Journal of Hematology* vol. 88(09), September 2003, pp. 1054 ff), where two of the eleven tested cyclists showed comparable abnormal results after descent from training in high altitude. Different from these two cyclists however, the Athlete’s altitude training was interrupted by brief trips to sea level and she suffered from diarrhea and dehydration at the commencement of the European Championships. Since there are no complete scientific studies of all these factors so far, the Athlete argues that these factors, together or separately, “*could be a major factor in explaining why*

the OFF-score levels in Sample 2 were exceeded". Any conclusion to the contrary would be speculative and unsupported by evidence.

68. The Sole Arbitrator observes that the city of Kislovodsk is located at an altitude of about 800 – 1,000 meter. The hotel where the Athlete resided ("Raduga") was situated close to the train station in the city of Kislovodsk at an altitude of 837 meter. The Athlete estimated the altitude of the hotel to be at 1,000 meter, the park where she trained at 1,200 meter and the stadium where she trained at 1,600 meter.
69. At the hearing the arguments of the Athlete were discussed by counsel for the Athlete and the experts called by the IAAF, in particular Dr. Schumacher, who is specialised in the effects of altitude on blood values.
70. The combination of staying overnight at about 800 meter and having training units at 1,500 meter and some higher training sessions during the day, can, in the opinion of Dr. Schumacher not have the impact as can be observed in Sample 2. Although the overall duration of the Athlete's training camp in Kislovodsk would be long enough to result in deviations in her blood values, the altitude of the hotel where she stayed was not high enough. Even if she trained at higher altitude for 3, 4 or 5 hours a day, this would still not cause measurable changes because the exposure to altitude is too short. Dr. Schumacher exemplified this conclusion with the argument that even persons living permanently at an altitude of 1,600 meter do not show any increased red blood cell mass, this would only be visible on persons permanently residing at an altitude of above 2,000 meter. Dr. Schumacher also testified that the magnitude of the OFF-score may be affected after descending from altitude to about 10%, whereas the magnitude of the OFF-score between Sample 2 and 3 is between 60-80% in the present case. This, in combination with the fact that Sample 3 was taken 4 days after return from altitude, whereas the lowest RET% value would normally only be reached after 6 days, convinced Dr. Schumacher in his conclusion that altitude was not the explanation of the abnormal blood values of the Athlete in Sample 2. Dr. Schumacher considered the blood values of Sample 2 typical for micro-dosing injections with EPO over a certain period of time, for example three to four times per week over a period of one month, having been stopped a week before the test or even earlier, so that EPO cannot be detected at the test.
71. The Sole Arbitrator has no reason to doubt about the convincing explanations of Dr. Schumacher in this respect.
72. The Sole Arbitrator further notes that the cyclists in the study referred to by the Athlete ascended to and trained for 26 days in altitude of 2,690 meters, whereas the Athlete in the matter at hand did not ascend to such high altitude. Even though this was not specifically discussed during the hearing, the Sole Arbitrator considers this to be an important reason why the situation of the Athlete cannot be compared to the research done on the cyclists.
73. As to the Athlete's arguments regarding dehydration, Prof. d'Onofrio confirmed the conclusions of the Second Joint Expert Opinion by pointing out that diarrhea can indeed lead to dehydration, but that experimental evidence shows that gastrointestinal fluid loss only has a minor impact on HGB. Dehydration studies have shown that plasma volumes remain fairly

stable, whereas other fluid compartments change significantly. 90% of the fluid lost comes from intercellular and interstitial water and only 10% from plasma volume. Besides, Prof. d'Onofrio testified during the hearing that dehydration can also not be the reason for a decrease of RET%.

74. Also in this respect, the Sole Arbitrator has no reason to doubt about the conclusions reached by Prof. d'Onofrio.

75. Consequently, the Sole Arbitrator finds that the blood values of Sample 2 can neither be explained by training/residing at high altitude or dehydration due to diarrhea individually, nor by a combination thereof.

b) *Can the blood values of Sample 2 and 3 be explained by mental stress?*

76. In her initial explanations by email dated 20 August 2015, the Athlete maintained the following:

"In 2012, after the European Championships in Helsinki my personal life has changed dramatically. I divorced and was left alone with a child, without significant financial resources. Divorce was accompanied by scandals, my ex-husband tried to take away my child, using all sorts of unworthy means, including statements to the police about kidnapping of my own child, etc. Before taking the sample 3 on the 12-th of October in 2012 I experienced a lot of stress".

77. In the Second Joint Expert Report, the Expert Panel argued as follows in this respect:

"Studies have shown that mental pressure acutely and significantly reduces plasma volume, thereby increasing concentration based blood markers such as haemoglobin of [sic] haematocrit. The average increase in haemoglobin after a mental stress challenge in the cited investigation was 0.7g/dl. In sample 3 however, the haemoglobin value is low compared to the remaining data. Thus, assuming that mental stress indeed had some effect on the blood profile at the time of sample 3, it would have been a hemoconcentration causing an increase in haemoglobin concentration. It can therefore be speculated that if the mental stress indeed had an impact, the real value of the athlete was even lower, which makes this sample even more different from samples 1 and 2".

78. Accordingly, the Sole Arbitrator understands that mental stress could potentially increase HGB levels. However, since the Athlete divorced on 9 October 2012 and argued that the most stressful time for her was after the divorce of her marriage, the Expert Panel maintains that this may have influenced the blood values of Sample 3 (12 October 2012), but not of Sample 2 (26 June 2012).

79. At the hearing, the Athlete argued for the first time that since Sample 2 was taken on the eve of a major international event, the stress and effect thereof should also be taken into account for Sample 2.

80. The Sole Arbitrator finds that this argument of the Athlete is to be dismissed as the Athlete failed to establish that the stress experienced before participation in a major competition can be equated to the stress experienced during a divorce and a dispute regarding child custody. Moreover, the Athlete failed to establish that she suffered from extraordinary stress at all at the moment Sample 2 was taken. The Sole Arbitrator finds that it cannot be accepted lightly that

an Athlete encountered a significant level of stress because of participating in a major international competition, because otherwise any athlete confronted with abnormal blood values could potentially use this argument in bad faith. As to the divorce and legal proceedings regarding the custody of her child which took place after Sample 2 was taken, the Athlete provided such evidence, but no evidence was submitted that stress was already encountered by the Athlete before the collection of Sample 2.

81. Insofar as the Athlete argues that because of the stress, she got prone to contamination by flu and stomach viruses, causing infection and diarrhea, the Sole Arbitrator finds that this argument has already been accounted for above at paras. 72 - 74.
 82. Consequently, in view of all the above, the Sole Arbitrator finds that the blood values of Sample 2 and 3 cannot be explained by mental stress.
- c) *Is it relevant for the proceedings at hand that another sample was taken from the Athlete on the day Sample 3 was taken?*
83. The Athlete maintains that on the day of collection of Sample 3 (*i.e.* 12 October 2012) not one but two samples were collected and that the results of these two tests show remarkably divergent data.
 84. Sample 3, the sample that is included in the Athlete's ABP, shows that the Athlete had the following blood values: HGB: 12.5, RET%: 1.62, OFF-score: 48.6, whereas Sample 3A, the sample that is not included in the Athlete's ABP, shows that the Athlete had the following blood values: HGB: 13.5, RET%: 1.78, OFF-score: 55.
 85. On 15 June 2016, the IAAF voluntarily produced the Athlete's ABP profile with the two RUSADA Samples (including Sample 3A).
 86. At the hearing, the IAAF argued that even if Sample 3 would be replaced by Sample 3A in the Athlete's ABP, this would not alter the conclusion that the RET% and OFF-score value fall below the expected range of normality. Prof. d'Onofrio added that the deviations between two samples taken on the same day can differ depending on daily activities and that the deviation between Sample 3 and 3A is fully compatible with normal daily variation. Dr. Schumacher added in this respect that also the moment of the day is probably important in explaining the deviations and that it can even make a difference whether the sample is collected when sitting or standing. Dr. Schumacher further put in doubt whether Sample 3A was actually taken on the same day, or rather on 13 October 2012.
 87. The Sole Arbitrator notes that the blood values of Sample 3 and 3A indeed differ, but that this deviation is not of such a magnitude as to raise doubts about the blood values measured. Indeed, if Sample 3 were to be ignored and replaced by Sample 3A, it would still be flagged as abnormal for HGB and OFF-score. In fact, whereas the RET% of Sample 3 fell within the thresholds of "normality", if it were to be replaced with Sample 3A, the RET% would also be flagged as abnormal.

88. Consequently, the Sole Arbitrator does not consider it relevant for the proceedings at hand that another sample was taken from the Athlete, either on the day Sample 3 was taken, or on the subsequent day.

d) Conclusion

89. With reference to scientific literature, the Athlete expresses a general doubt regarding the reliability of the ABP as she submits that the literature referred to suggests that it is very likely that the Adaptive Model used in the analysis of the ABP does not adequately account for physiological variations, which could lead to a false-positive. Based upon the evidence presented by the IAAF, and upon the Athlete's sworn declaration, it is very probable that a false positive occurred in this case.

90. The Sole Arbitrator observes that the ABP has been generally accepted as a reliable and accepted means of evidence to assist in establishing anti-doping rule violations (see VIRET M., *Evidence in Anti-Doping at the Intersection of Science and Law*, 2016, p. 735; LEWIS/TAYLOR (Eds.), *Sport: Law and Practice*, 2014, para. C.126).

91. This is not to say that no criticism on the ABP is permitted or that the reliability of the evidence provided by the ABP in a specific case cannot be reproached, it is however at least indicative that the credibility of the ABP system as a whole is not to be mistrusted easily. The Sole Arbitrator hence finds that the ABP system is to be presumed valid, unless convincing arguments are made that a specific element of the system does not operate satisfactorily.

92. In the absence of any specific evidence being submitted or arguments being advanced, corroborated by opinions of renowned experts in the field, the Sole Arbitrator is not persuaded by the Athlete's general argument that the Adaptive Model does not adequately account for physiological variations.

93. The Sole Arbitrator is however mindful of the warnings expressed in legal literature that a pitfall to be avoided is the fallacy that if the probability of observing values that assume a normal or pathological condition is low, then the probability of doping is automatically high (VIRET M., *Evidence in Anti-Doping at the Intersection of Science and Law*, 2016, p. 763, with further references to Dr. Schumacher and Prof. d'Onofrio 2012, p. 981; Sottas 2010, p. 121) and that it has been submitted in this context that "*if the ADO is not able to produce a "doping scenario" with a minimum degree of credibility ("density"), the abnormality is simply unexplained, the burden of proof enters into play and the ADO's case must be dismissed since there is no evidence pleading in favour of the hypothesis of "doping" any more than for another cause*" (VIRET M., *Evidence in Anti-Doping at the Intersection of Science and Law*, 2016, p. 774).

94. This view has indeed also been adopted in CAS jurisprudence and the Sole Arbitrator finds that another CAS panel summarised it nicely by stating that "*abnormal values are (for the purposes of the ABP) a necessary but not a sufficient proof of a doping violation*" (CAS 2010/A/2235, para. 86). Although such panel continued by emphasising that it is not necessary to establish a reason for blood manipulation, the panel noted the coincidence of the levels with the athlete's racing schedule and stated the following:

“As Dr. Sottas convincingly explained, in the same way as the weight of DNA evidence said to inculpate a criminal is enhanced if the person whose sample is matched was in the vicinity of the crime, so the inference to be drawn from abnormal blood values is enhanced where the ascertainment of such values occurs at a time when the Athlete in question could benefit from blood manipulation” (CAS 2010/A/2235, para. 102).

95. The Sole Arbitrator agrees with these considerations and, as such, concludes that from the mere fact that an athlete cannot provide a credible explanation for the deviations in his or her ABP it cannot automatically be deduced that an anti-doping rule violation has been committed. Rather, the deviations in the ABP are to be interpreted by experts called to put into the balance various hypothesis that could explain the abnormality in the profile values, *i.e.* a distinction is made between a “quantitative” and a “qualitative” assessment of the evidence.
96. As to a qualitative assessment of the evidence, the Athlete argues that the language used in the two Joint Expert Opinions is not in conformity with the WADA ABP Operating Guidelines and, as such, cannot be considered to meet the standards set out therein.
97. Although this is true, the Sole Arbitrator noted that both Prof. d’Onofrio as well as Dr. Schumacher unequivocally confirmed the conclusions in the Joint Expert Opinions during the hearing, using exactly the wording of section 6.d of the Appendix E to the WADA ABP Operating Guidelines and stated that *“based on the information in the Passport, it is highly likely that the Athlete used a Prohibited Substance or Prohibited Method, and that it was unlikely to find the Passport abnormal assuming any other cause”*. As such, insofar the conclusions of the Expert Panel were not entirely in line with the wording of the WADA ABP Operating Guidelines, this omission was repaired.
98. Having dismissed the Athlete’s criticism on the ABP and having not admitted, in application of Article R56 of the CAS Code and as announced at the hearing, general arguments with regard to the ABP discussed in the case CAS 2016/O/4464, which the Athlete wanted to introduce during the hearing without any prior reference in her submissions in writing, the Sole Arbitrator finds that although the Athlete was not able to provide a credible non-doping related explanation for the abnormal values in her ABP as a whole, he reiterates that this does not automatically mean that the abnormal values are necessarily to be explained by doping. Rather, the Sole Arbitrator needs to be convinced that the abnormal values are caused by a “doping scenario”, which does not necessarily derive from the quantitative information provided by the ABP, but rather from a qualitative interpretation of the experts and possible further evidence.
99. In respect of Samples 2 and 3, the Expert Panel determined as follows in the First Joint Expert Opinion on the basis of a qualitative assessment of the evidence:

“From a qualitative point of view and as indicated by the statistical analysis mentioned above, the variations of haemoglobin from 125 g/l to 165 g/l and of reticulocytes, from 0.2% to 1.62% are highly unphysiologic.

Sample 2 collected on the eve of the 2012 European Championship in Helsinki presents the typical constellation found in athletes after the use and discontinuation of an erythropoietic stimulating agent or the recent application of a blood transfusion: high haemoglobin value, low reticulocyte value and in consequence high OFF-score value”.

100. In the Second Joint Expert Opinion, the following is concluded from a qualitative perspective:

“We refer to our previous evaluations for the abnormalities observed in the profile. In brief, the key abnormality was a typical “OFF scenario” with an OFF score of 138 observed on the eve of the European Championships in Helsinki in 2012 (sample 2). On the other occasions (during out of competition periods), the athlete displayed normal values for a female athlete (samples 4 and 5). We therefore concluded that the profile was typical for blood manipulation by displaying features of supraphysiologically increased red cell mass.

[...].

In contrast to the explanations provided by the athlete, it is typical to observe features such as seen in the profile assuming blood manipulation, notably an artificial increase in red cell mass for the 2010 European Championships. Considering the information available at this stage, we therefore confirm our previous opinion that this profile is highly suspicious for blood manipulation”.

101. Whereas the IAAF submits that the ABP contains only one allegedly abnormal sample (Sample 2), Prof. d’Onofrio, while confirming the finding in the Second Joint Expert Opinion argued at the hearing that an artificial increase in red cell mass, presumably by use and discontinuation of an ESA or by recent application of a blood transfusion, most likely resulted in the high levels of HGB in Sample 3. This, paired with low RET%, resulted in a high OFF-score in Sample 2. Prof. d’Onofrio explained that this deviation between Sample 2 and 3 supports the submission of the IAAF that Sample 3 was moderately suspicious for the use of a Prohibited Method (withdrawal of blood).
102. The Sole Arbitrator finds that, although Sample 3 in itself is not indicative of any use of a prohibited substance or a prohibited method, if seen in relation with Sample 2, the deviation between the two samples is however indicative of the use of blood doping. This conclusion is not simply based on the deviation of Sample 2 with Sample 3, but indeed also on the deviation between Sample 2 on the one hand and Sample 4 and 5 on the other, the latter blood values being comparable with the blood values of Sample 3.
103. In addition, importantly, the Sole Arbitrator notes that Sample 2 was taken on the eve of an important competition (*i.e.* the European Championship in Helsinki), whereas Sample 3, 4 and 5 were not taken in temporal vicinity to a competition. As testified by Dr. Schumacher, high HGB values enhance sporting performance. The Sole Arbitrator therefore finds that the coincidence of the fact that Sample 2 contained high HGB values, whereas Sample 3, 4 and 5 contained no such high levels, makes it indeed highly likely that the abnormal blood values in Sample 2 are to be explained by the use of prohibited substances or prohibited methods.
104. On the basis of all the above, the Sole Arbitrator is comfortably satisfied by the qualitative assessment of the Athlete’s ABP that the Athlete committed an anti-doping rule violation, *i.e.* the IAAF succeeded to establish that the abnormal values in the Athlete’s ABP are caused by a “doping scenario”.
105. Consequently, the Sole Arbitrator finds that the Athlete violated Rule 32.2(b) of the 2012-2013 IAAF Rules.

ii) If an anti-doping rule violation was committed, what sanction shall be imposed on the Athlete?

106. The Sole Arbitrator observes that Rule 40.2 of the 2012-2013 IAAF Rules determines the following:

“The period of Ineligibility imposed for a violation of Rules 32.2(a) (Presence of a Prohibited or its Metabolites or Markers), 32.2(b) (Use or Attempted Use of a Prohibited Substance 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”.

107. Rule 40.5(b) of the 2012-2013 IAAF Rules determines as follows:

“No Significant Fault or Negligence: If an Athlete or other Person establishes in an individual case that he bears No Significant Fault or Negligence, then the otherwise applicable period of Ineligibility may be reduced, but the reduced period of Ineligibility may not be less than one-half of the period of Ineligibility otherwise applicable. If the otherwise applicable period of Ineligibility is a lifetime, the reduced period under this Rule may be no less than eight (8) years. When a Prohibited Substance or its Markers or Metabolites is detected in an Athlete’s Sample in violation of Rule 32.2(a) (Presence of a Prohibited Substance), the Athlete must establish how the Prohibited Substance entered his system in order to have the period of Ineligibility reduced”.

108. Rule 40.6 of the 2012-2013 IAAF Rules determines as follows:

“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”.

109. Whereas the Athlete argues that the standard period of ineligibility of two years shall be reduced, the IAAF submits that the period of ineligibility is to be increased.
110. Commencing with the submissions of the Athlete, during the hearing the Athlete invoked Rule 40.5(b) of the IAAF Rules and argued that because of the fact that there was only one abnormal sample (Sample 2) she bore only no significant fault or negligence. The Athlete argued that the period of ineligibility should therefore be reduced to one year only.
111. The Sole Arbitrator finds that the number of samples establishing an anti-doping rule violation in the framework of an ABP profile, without any further argument, cannot be considered as a starting point for discussing any reduction of the regular sanction.
112. The Athlete in no way established that the abnormal blood values in Sample 2 were caused by circumstances for which the Athlete bore no significant fault or negligence. As argued by the IAAF during the hearing, if the Athlete’s explanations regarding altitude, stress and dehydration were upheld, there would simply be no anti-doping rule violation.
113. Consequently, the Sole Arbitrator finds that the Athlete is not entitled to any reduction of the otherwise applicable period of ineligibility of two years.
114. Turning his attention then to the question of whether the “standard” period of ineligibility of two years shall be increased due to aggravating circumstances, the Sole Arbitrator notes that, according to the IAAF, such aggravating circumstances consist of (i) the use of a prohibited substance or prohibited method on multiple occasions; and (ii) engaging in a doping plan or scheme.
115. In respect of the use of a prohibited substance or prohibited method on multiple occasions, at the hearing, Dr. Schumacher considered the picture shown by Sample 2 as typical for an injection with EPO over a certain period of time, for example three to four times per week over a period of one month, having been stopped a week before the test or even earlier, so that EPO could not be detected at the test. Dr. Schumacher did, however, not withdraw the other possible explanation mentioned in the Second Joint Expert Opinion, which is transfusion of blood. Also Prof. d’Onofrio did not contradict the explanation given in the Second Joint Expert Opinion.
116. Since the experts provide two possible explanations, even favouring one of them (multiple injection of EPO), but did not exclude the other one (transfusion of blood, which would make sense also if applied only once, and without specifying whether any third person might have been involved), the Sole Arbitrator is neither comfortably satisfied of a “doping scenario”, nor a “doping plan” being established.
117. The Sole Arbitrator is not satisfied to his comfortable satisfaction that Sample 3 is indicative for blood manipulation. In this respect, the Sole Arbitrator finds Prof. d’Onofrio’s statement during the hearing that Sample 3 is moderately suspicious for blood withdrawal insufficient.

This statement has neither been supported by a respective unanimous statement in the First or Second Joint Expert Opinion, nor by any other evidence on file.

118. Since no satisfactory evidence has been presented that the Athlete engaged in blood doping more than once, the Sole Arbitrator finds that no use of a prohibited substance or prohibited method on multiple occasions could be established.
119. In the opinion of the Sole Arbitrator, this finding is also not contradicted by the reference of the IAAF to the report of the WADA Independent Commission in its written submissions arguing there that the Athlete was part of an organised and sophisticated doping system. At the hearing, the IAAF clarified that it considers the present matter to be an ABP case and that the report of the WADA Independent Commission was only mentioned *en passant*.
120. The Sole Arbitrator finds that the accusation in the report of the WADA Independent Commission is not sufficient evidence in itself to conclude that the Athlete was indeed part of an organised and sophisticated doping system, as the evidence based on which this conclusion was reached should have been made available in the present arbitration in order for conclusions to be drawn therefrom. However, no such evidence has been presented. In the absence thereof, the Sole Arbitrator finds that the conclusion in the report that the Athlete was part of an organised and sophisticated doping system and was herself engaged in doping practices, is not in itself sufficient to conclude that this is true and that the period of ineligibility to be imposed on the Athlete is to be increased due to aggravating circumstances.
121. The Sole Arbitrator observes that CAS jurisprudence has determined the following in the context of avoiding detection and/or adjudication of a doping violation:

“The Sole Arbitrator notes that most, if not all, doping practices are timed to avoid detection. As a result, an aggravating circumstance is likely to require a further element of deception. However, since IAAF Rule 40.6 is already engaged, this point may be left open in this case” (CAS 2012/A/2772, para. 129).
122. Although left open in that case, this principle was applied in CAS 2013/A/3080, although also there other aggravating circumstances were considered to be present.
123. The Sole Arbitrator finds that in the matter at hand there is “*no further element of deception*” besides a general intent of the Athlete to use a prohibited substance or prohibited method while trying to avoid detection.
124. The Sole Arbitrator also finds that no provision in the IAAF Rules indicates that an anti-doping rule violation proven by means of the ABP, *per se*, justifies a higher sanction than the presence of a prohibited substance.
125. The Sole Arbitrator feels himself comforted in this conclusion by the reasoning of another CAS panel in respect of the UCI ADR:

“UCI claims that blood manipulation constitutes an aggravating factor and, consequently, that a minimum three-year ban should be imposed upon the Athlete. This submission has no foundation in the UCI ADR which does not under article 293 differentiate between various forms of first offence or suggest that blood

manipulation attracts ratione materiae a higher sanction than the presence of a prohibited substance. It is the circumstances of the offence, not the commission of the offence itself which may aggravate. Here there is nothing before the CAS Panel to displace the presumption that 2 years ineligibility for a first offence is appropriate in this case” (CAS 2010/A/2235, para. 119).

126. In the absence of any aggravating circumstances being established, the Sole Arbitrator finds that the “standard” two year period of ineligibility is to be imposed on the Athlete.
127. The Sole Arbitrator finds that for practical reasons and in order to avoid any eventual misunderstanding the period of ineligibility shall start on 7 September 2015, the date of commencement of the provisional suspension, and not on the date of the award.
128. Finally, turning his attention to the disqualification of the Athlete’s results, the Sole Arbitrator observes that Rule 40.8 of the IAAF Rules determines as follows:

“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 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”.

129. The Sole Arbitrator notes that irrespective of version literal reading of Rule 40.8 IAAF Rules 2012-2013, this provision must be understood as including a fairness exception. This follows from the fact that Article 10.8 of the World Anti-Doping Code 2009 (“the WADC”), in force at the relevant time, included a fairness exception, that this provision was part of the obligatory commitment of the IAAF as signatory to the WADC according to Article 23.2.2 WADC and that the IAAF was not allowed to include any substantial change to this provision. The Sole Arbitrator sees an obligation to understand Rule 40.8 IAAF Rules 2012-2013 harmoniously with Article 10.8 WADC. For whatever reason, the fairness exception was not mentioned explicitly by the IAAF Rules 2012-2013, but had nevertheless to be applied based on IAAF’s commitment to Article 10.8 WADC. In a case where the WADC did not allow for any substantial deviation of the IAAF Rules from the WADC, the provision of Rule 47.5 IAAF Rules 2012-2013, otherwise providing that “*in case of conflict between these Anti-Doping Rules and the Code, these Anti-Doping Rules shall prevail*” is not applicable. The Sole Arbitrator, as to Article 10.8 WADC, sees no room for a possible conflict between the IAAF Rules 2012-2013 and the WADC.
130. The Sole Arbitrator observes that the present facts are not a case of a specific “positive sample”, it is however a case that falls under Rule 40 of the IAAF Rules, as a consequence of which the Athlete’s competitive results are nevertheless subject to disqualification. A complicating factor in this respect is that an anti-doping rule violation established on the basis of an ABP does normally not determine when the violation of Rule 32.2(b) of the IAAF Rules was committed exactly, but rather that based on all the evidence available it must be concluded that a violation was committed during a certain period. This difficulty has already been identified in CAS jurisprudence (CAS 2010/A/2235, para. 116).

131. In the present case, as set out *supra*, the Sole Arbitrator is satisfied to accept that Sample 2 is evidence of the use of a prohibited substance or a prohibited method by the Athlete. The Sole Arbitrator is however not satisfied that the Athlete engaged in a doping plan or scheme over a certain period of time, but rather that the Athlete used a prohibited substance or a prohibited method in the preparations leading up to the European Championships in Helsinki, on the eve of which Sample 2 was collected (*i.e.* 26 June 2012).
132. The Sole Arbitrator notes that pursuant to the literal wording of Rule 40.8 of the IAAF Rules all the competitive results of the Athlete as from the moment the positive sample was collected until her provisional suspension was pronounced would have to be disqualified, *i.e.* a period of more than three years and two months.
133. Although there is no positive sample in the matter at hand, the Sole Arbitrator finds that Sample 2 can be equated to a positive sample and that the date of collection of this sample is therefore decisive for the commencement of the disqualification of the Athlete's results.
134. The Sole Arbitrator observed that Sample 2 was collected on 26 June 2012, but that the result management process was only commenced shortly before 14 July 2015, the latter being the date of the First Joint Expert Opinion, whereas no valid explanations were provided for the late start of this process.
135. Upon an inquiry from the Sole Arbitrator, the IAAF explained that the late commencement of the result management process may have been caused by the change of the (external) athlete passport management units (APMUs) or that there may have been a personal failure or that the ABP software did not work appropriately.
136. The Sole Arbitrator finds that the reasons given by the IAAF are no valid justifications for the fact that the IAAF started the result management only 3 years after collection of Sample 2 and, thus, are not reasons that should be detrimental to the Athlete.
137. Although the IAAF initially requested for Rule 40.8 of the IAAF Rules to be applied strictly and all results of the Athlete to be disqualified until her provisional suspension pronounced on 7 September 2015, during the hearing the IAAF made the concession that, in the circumstances of the present case, it would be reasonable to decide based on fairness.
138. The IAAF suggested to apply fairness by analogy to retesting cases, where certain results obtained after the anti-doping rule violation are left untouched. The IAAF indicated that the policy of the IAAF in retesting cases is that the disqualification is for such period as the disqualification would have been if the sanction would have been pronounced at the time of the anti-doping rule violation, the *rationale* being that the athlete would not have been able to achieve these results had the result management process started immediately.
139. The Athlete argued that retesting cases are different from the situation at hand, because in retesting cases there is a clear reason why the result management process started so late, whereas no such reason is present here. The Athlete however did not make any suggestion as to how this situation should be dealt with.

140. The Sole Arbitrator finds that fairness indeed demands that Rule 40.8 of the IAAF Rules is not applied strictly in the matter at hand.
141. The Sole Arbitrator does not deem it appropriate to entirely dispose of any disqualification of results as he is convinced that the Athlete doped and because the main purpose of disqualification of results is not to punish the transgressor, but rather to correct any unfair advantage and remove any tainted performances from the record (LEWIS/TAYLOR (Eds.), *Sport: Law and Practice*, 2014, para. C.162, with further references). The Sole Arbitrator, considering that neither a doping scheme, nor a doping plan has been established in the present case, deems it adequate and proportionate, comparing to other cases where a single anti-doping rule violation could have been established through the analysis of a positive sample, to disqualify the results of the Athlete for a period of six months. Six months seem to be a period long enough for an anti-doping organization to perform results management including a possible disciplinary proceeding.
142. As a consequence, the Sole Arbitrator finds that a period of ineligibility of two years is to be imposed on the Athlete and that the results of the Athlete achieved in the period between 26 June 2012 and 25 December 2012 included are to be disqualified, including the forfeiture of any titles, awards, medals, points and prize and appearance money.
- (...)
149. The present award may be appealed to CAS pursuant to Rule 42 of the IAAF Rules.

ON THESE GROUNDS

The Court of Arbitration for Sport rules that:

1. The claim filed on 22 February 2016 by the International Association of Athletics Associations against the All Russia Athletics Federation and Ms Kristina Ugarova is upheld.
 2. A period of ineligibility of two years is imposed on Ms Kristina Ugarova starting from 7 September 2015.
 3. All results of Ms Kristina Ugarova since 26 June 2012 are disqualified through to 25 December 2012, including forfeiture of any titles, awards, medals, points and prize and appearance money obtained during this period.
- (...)
6. All other and further prayers or requests for relief are dismissed.