



Arbitration CAS 2015/A/4006 International Association of Athletics Federations (IAAF) v. All Russia Athletics Federation (ARAF), Yuliya Zaripova & Russian Anti-Doping Agency (RUSADA), award of 25 April 2016 (operative award of 24 March 2016)

Panel: Prof. Luigi Fumagalli (Italy), President; Mr Romano Subiotto QC (United Kingdom); Mr Mika Palmgren (Finland)

Athletics (3000m steeplechase)

Doping (Athlete's Biological Passport, ABP)

Principle of lex mitior

Concept of fairness

Principle of proportionality

1. When applying the *lex mitior* principle in case of anti-doping rule violations, either the set of rules applicable at the time when the anti-doping rule violation was committed or otherwise the rules applicable at the time the decision is adopted are to be determined as the applicable set of rules most favourable to the accused, without picking individual provisions from each. The hearing body cannot undertake a rule-by-rule comparison of the two systems, picking the most favourable rule of each system.
2. The concept of “fairness” is a broad one, covering a number of elements that the deciding body can take into account in its decision not to disqualify some results. In the past CAS panels took into account a number of factors, such as the nature and severity of the infringement, the length of time between the anti-doping rule violation, the result to be disqualified and the disciplinary decision, the presence of negative tests between the anti-doping rule violation and the competition at which the result to be disqualified was achieved, and the effect of the infringement on the result at stake. It is not a single element that is decisive alone: an overall evaluation of them is necessary.
3. The principle of proportionality implies that there must be a reasonable balance between the kind of misconduct and the sanction, and in particular that (i) the measure taken by the governing body can achieve the envisaged goal, (ii) the measure taken by the governing body is necessary to reach the envisaged goal, and (iii) the constraints on the affected person resulting from the measure are justified by the overall interest of achieving the envisaged goal. In other words, to be proportionate, a measure must not exceed what is reasonably required in the search for a legitimate objective.

I. BACKGROUND

1.1 The Parties

1. The International Association of Athletics Federations (“IAAF” or the “Appellant”) is the international federation for the sport of athletics. IAAF is an association under the laws of Monaco and has its headquarters in Monte Carlo, Monaco.
2. The All Russia Athletics Federation (“ARAF” or the “First Respondent”) is the national governing body for the sport of athletics in the Russian Federation and the Member Federation of IAAF for the Russian Federation.
3. Ms Yuliya Zaripova (the “Athlete” or the “Second Respondent”) is an international-level athlete of Russian nationality specialising in the 3000m steeplechase event, who has competed at an elite international level for a number of years with considerable success.
4. The Russian Anti-Doping Agency (“RUSADA” or the “Third Respondent”) is the national anti-doping agency established for the Russian Federation.
5. ARAF, the Athlete and RUSADA are hereinafter jointly referred to as the “Respondents”.

1.2 The Dispute between the Parties

6. The object of the dispute between the parties is a portion of a decision issued by a disciplinary committee of RUSADA in an anti-doping case brought against the Athlete, based on the irregularities observed between August 2009 and August 2012 in the athlete’s biological passport (the “ABP”) concerning the Athlete. IAAF started the present arbitration claiming that the applicable anti-doping rules adopted by IAAF (the “IAAF ADR”) to implement the provisions of the World Anti-Doping Code (the “WADC”) had not been correctly applied on a specific point (disqualification of results).
7. The circumstances stated below summarize the main relevant facts concerning the dispute, as submitted by the parties in their written pleadings or in the evidence offered during the course of the proceedings. Additional facts may be set out, where relevant, in connection with the following legal discussion.
8. A preliminary point of explanation is however necessary to clarify the factual background of the dispute. As mentioned, it follows the application of the ABP model to the Athlete, and some discussions took place in this arbitration about the ABP and its evidentiary value to establish an anti-doping rule violation, and more specifically the use of a prohibited substance or of a prohibited method. As submitted by IAAF, unlike direct detection methods, the ABP focuses on the effect of prohibited substances or methods on the body, rather than on their detection. For such purposes, the ABP was developed as an individual, electronic record for each athlete, in which the results of all doping tests over a period of time are collated. The ABP involves regular monitoring of biological markers on a longitudinal basis to facilitate the indirect

detection of prohibited substances and methods. The list of relevant markers for a specific class of substance (*e.g.*, substances enhancing oxygen transfer such as recombinant EPO) are identified and monitored on a regular basis for a given athlete, in order to establish an effective longitudinal monitoring program. The collection and monitoring of values corresponding to these identified markers constitutes an individual longitudinal profile. Each collected sample is analysed following the appropriate analytical protocol and the biological results are incorporated into the Anti-Doping Administration and Management System (ADAMS), which is a web-based database management tool for data entry, storage, sharing, and reporting designed to assist stakeholders and the World Anti-Doping Agency (“WADA”) in their anti-doping operations. The statistical model developed for the ABP program is then applied to the results of analyses to determine an abnormal profile score. More specifically, once the new biological data are entered in ADAMS, a notification is sent to the Athlete Passport Management Unit, which updates the Athlete’s Passport and applies the ABP software, *i.e.* the Adaptive Model. The Adaptive Model is a mathematical model that was designed to identify unusual longitudinal results from athletes. The model calculates the probability of a longitudinal profile of marker values assuming that the athlete has a normal physiological condition. The Athlete Passport Management Unit proceeds with the mandatory steps outlined in the rules, which includes liaising with an expert panel established by the IAAF, if the athlete’s haemoglobin (HGB) and/or OFF-hr-Score (OFFS) values exceed the 99.9 percentile of the expected ranges returned by the Adaptive Model. The statistical result for the athlete does not in itself justify a conclusion that an anti-doping rule violation has occurred, but calls for an explanation by the athlete.

9. In 2009, IAAF started its ABP program. The Athlete was included by the IAAF in its ABP program and subjected to eleven in- and out-of-competition blood sample collections between August 2009 and August 2012. The analyses gave the following results¹:

	Collection date	RET [%]	HGB	Off-score
1	14.08.2009	0.64	14.6	98.00
2	18.06.2010	0.59	14.8	101.90
3	27.07.2010	0.70	14.2	91.80
4	20.03.2011	0.64	13.2	84.00
5	16.05.2011	0.91	14.6	88.80
6	20.07.2011	1.85	14.4	62.40
7	26.08.2011	0.67	14.5	95.90
8	09.11.2011	1.15	13.8	73.70
9	12.01.2012	1.18	13.9	73.80
10	27.05.2012	1.04	14.5	83.80
11	03.08.2012	0.63	16.0	112.40

10. The biomarker values from the samples collected from the Athlete were considered to be highly abnormal. As a consequence, the resulting Athlete’s profile was sent to three independent experts, who unanimously concluded, in their initial review (the “Initial Review”), that this

¹ Such results are taken from the IAAF appeal brief in this arbitration, and are in themselves undisputed.

profile was “highly unlikely” to be “the result of a normal physiological or pathological condition, and may be the result of the use of a prohibited substance or prohibited method”. In particular:

- i. Professor Yorck Olaf Schumacher² in an opinion dated 27 October 2012 observed the following:

‘From a formal point of view, one sample was excluded a priori because the timeframes for the analytical turnover were not respected. In the information contained in the documentation packages of the remaining 10 samples, there is no indication that analytical or pre-analytical issues might have influenced the results in a way that would render a sample abnormal or influence the result to the disadvantage of the athlete. There are some inconsistencies with the reported times for the analytical steps in some of the documentation packages, however, we do not think that any of those shortcomings have significantly impacted the results. Regarding a quantitative evaluation, the sequences of the profile are abnormal at the 99.9% level for Reticulocyte% and OFF score. The athlete has values beyond her individual limits for all three variables on several occasions (upper limit). The profile therefore fulfils the formal criteria of being further reviewed (IAAF Blood testing Protocol part IV, 9.3).

From a qualitative point of view, the profile mainly bears data from the summer months, with some tests in November/ January. It appears that the Haemoglobin concentration during the winter months is always lower than during the summer (see for example samples 4, 7, 8 in comparison to the summer samples 5, 9, 10). No such pattern is observed in the Reticulocytes, which rather show an opposite pattern with low values in summer.

In the Reticulocytes however, one exceptionally abnormal value stands out (sample 5), without any concomitant change in Haemoglobin. The data of this sample suggests a stimulation of erythropoiesis, which comes a month before the IAAF world championships 2011 in Daegu. Interestingly, the MCV in this sample 5 is much higher than in the remaining samples, which stems from a relatively elevated Haematocrit measured in this specimen (46.4% for a Haemoglobin concentration of 14.4g/dl). The reason for this discrepancy remains unclear, analytical aspects are unlikely to have caused this feature. In the next sample (sample 6, obtained one month later at Daegu), Reticulocyte percentage has fallen to about 1/3 of the previous value (to 0.67% from 1.85%), which is highly suspect and suggests an inhibition of erythropoiesis at the time of sampling, a so called “OFF-situation”. This does not seem to be a normal pattern for the athlete, as such variations are not observed anywhere else in the profile and especially the Reticulocyte data normalise in the following samples with values around 1%. Subsequently, a similar pattern with very low Reticulocytes is again observed at the Olympic Games in London (sample 10), this time paired with the highest Haemoglobin value of the profile, which emphasizes the suspicion on this specimen. It is to be noted that also the first three samples of the profile that present the pattern with low Reticulocytes have been obtained in close timely vicinity to major competitions.

According to her “whereabouts”, the athlete never spent extended periods of time at relevant altitudes, a pathology as a potential cause for the observed abnormalities can also be excluded with a high likelihood, as the other variables of both the red and the white blood cell system appear normal.

I therefore conclude that it is highly unlikely that the longitudinal profile is the result of a normal physiological or pathological condition but might in contrast be caused by the use of a prohibited substance

² Professor of internal medicine and sports medicine at the University of Freiburg, Germany.

or prohibited method”;

- ii. Professor Giuseppe d’Onofrio³ expressed on 5 November 2012 the following opinion:

“The probability of abnormality, according to ABP software, is 98.0% for hemoglobin, 99.91% for reticulocytes and 99.98% OFF score, at the 99.9% specificity level. The profile violates the passport limits for the Athlete in three occasions, one for each parameter.

Hematological evaluation

Two abnormal samples are included in this profile. Sample 6 (of the original sequence), collected on 20-7-2011, one month before the Daegu event, shows high reticulocytes and indicates erythropoietic stimulation. Sample 11 (of the original sequence), collected on 3-8-2012 at the London Olympic Games, shows the highest hemoglobin of the profile (by more than 10 g/l), with a value of 160 g/l which is above the 95% population reference limit for women. The abnormality of this last results clearly demonstrates a scenario of blood doping probably based on ESA intake.

Quality of hematological laboratory results

Analytical quality, as demonstrated by quality control and instrument reports, is excellent for the nine valid samples. According to the APMU evaluation provided, there are only minimal administrative inaccuracies in the documentation packages, which absolutely do not affect the analytical outcome”;

- iii. Professor Michel Audran⁴ noted in the opinion of 30 October 2012 the following comments:

“Passport examination

The probabilities of abnormalities of different sequences are respectively: 98% for HGB, 99.98% for Off-score and 99.91% for RET%.

One HGB and one Off-score values are above the upper limit of the expected athlete normal range, calculated with a probability of 99.9% (sample 11).

One RET% value (sample 6) is above the upper limit of the expected athlete normal range, calculated with a probability of 99.9%.

Samples 1, 2, 3, 7, which are close to competitions, show about the same HGB values with low but normal RET% values and low IRF %.

Such RET% and IRF value aren’t observed in samples 5, 8, 9, 10 far for competitions.

Sample 4 shows the lowest HGB value of the profile. Even if the RET% value is low, 0.64%, the IRF value (8- 10.2%) shows a stimulation of erythropoiesis. This stimulation can’t be due to altitude as the athlete stayed in Vladivostok and Cheboksary on this period.

Sample 6 shows a high and abnormal RE% value. This stimulation of erythropoiesis is sustained by the IRF value (12.8-14.1%).

We could think about a preparation for Daegu, however, an HGB increase doesn’t appear for weeks later in Daegu sample.

³ Professor of clinical pathology and immunohematology at the Catholic University of the Sacred Heart in Rome, Italy.

⁴ Professor at the biophysical and bioanalysis laboratory of Faculty of Pharmacy, University of Montpellier I, France.

Sample 11 shows a high and abnormal HGB value. Although the RET% value isn't very low, the slowdown of the erythropoiesis is sustained by the low IRF value (2.1-0.6%). Moreover, the OFF-score value is abnormal too (99.9%).

This sample is the most suspect of the passport all the more that the mean HGB value without this sample is 142.5 g/L and 160 g/l is more than 10% above of this mean value.

Expert opinion

As the main abnormalities of this passport are close or during sports events of high importance, this passport is highly suspect.

The high RET% value of sample 6, about one month before Deagu and the high and abnormal HGB value of sample 11 during the Olympics Games must be justified".

11. On 3 December 2012, the IAAF forwarded the Initial Review to ARAF and, *inter alia*, in accordance with the IAAF ADR, requested that the Athlete be given an opportunity to explain her abnormal blood profile.
12. On 25 July 2013, the Athlete accepted a provisional suspension.
13. IAAF, then, in the subsequent period, sent several letters to ARAF reminding it that it had to review the case of a possible anti-doping rule violation by the Athlete. On 27 June 2014, finally, IAAF sent a notification to ARAF pointing out that, in violation of the applicable IAAF ADR, ARAF had not reviewed the case of the Athlete and informed it that, in the absence of such review by a set deadline, IAAF would take the case to the Court of Arbitration for Sport (the "CAS") in accordance with the pertinent provisions of the IAAF ADR.
14. On 8 August 2014, ARAF referred the matter to RUSADA, requesting it to review the case, conduct hearings with the Athlete's participation and decide whether an anti-doping rule violation had been committed.
15. Following ARAF's referral, RUSADA submitted the ABP of the Athlete to three other independent experts, who provided the following opinions:
 - i. Professor Robin Parisotto⁵ observed on 21 November 2014 the following:

"Overall there are four distinct features in this profile that require explanation and are outlined below.

Observation 1

The overall variability in Haemoglobin (Hb) measures is 21.2 % (132 – 160 g/L). Also the variability in Haematocrit (Hct) measures is 19.2% (39.6 to 47.2). It has been documented ... that variations in Hb exceeding 15% between blood samples from elite endurance athletes would be indicative of blood manipulation. The large variability in Hb measurements particularly noting that the Hb value in PRE sample 12 (160) preceding the 2012 Olympic Games is higher than all other Hb values and requires explanation.

Observation 2

⁵ Australian Institute of Sport, Canberra, Australia.

The reticulocyte value of sample 6 (1.85%) is significantly high in the context of the overall profile where most values were less than 1.0%. This has resulted in the lowest OFF-score in the profile (62.4). It was noted that this sample coincided with the athlete's use of a hypoxic tent however on two other occasions where the athlete had indicated the use of a hypoxic tent (samples 7 and 12) the respective reticulocyte values were 0.67% and 0.63%. Therefore the value for sample 6 requires explanation.

Observation 3

The pattern between samples 10 and 11 demonstrating an increase in Hb of 15 g/L (145 to 160 g/L) and decreasing reticulocyte values of 1.04 to 0.63% resulting in a very high OFF-score in sample 11 in particular (112.4) which is significantly above the normal range high limit of 94.0, requires explanation. In normal healthy individuals increasing Hb levels are associated with normal and/or increased reticulocyte levels. There are few if any medical and/or physiological phenomena (such as a medical blood transfusion) which are associated with such combinations of blood parameters. For instance, it is known that permanent high altitude dwellers with high Hb levels descending to sea level appear to have preferential destruction of reticulocytes, a term known as neocytoysis possibly resulting in high Hb and low reticulocyte levels

The athlete did indicate the use of a hypoxic tent between these two samples for a period of six months however it is unknown what altitude was used during the exposure. Unless the exposure has been at very high levels it is doubtful that such a pattern is a consequence of altitude exposure. It is intuitive that as Hb increases so should the reticulocytes indicating normal erythropoietic activity. The pattern of increasing Hb levels and decreasing reticulocyte levels observed between these two samples are typical of that seen post r-HuEPO administration ... and/or post transfusion

The athlete indicated that in the period prior to sample 10 that she had endured two menses however this had no bearing on the relationship with sample 11 as the Hb and Hct had increased between samples 9 and 10 and reticulocytes had decreased; this is in contrast to what would be expected during menses i.e. decreasing Hb and increasing reticulocytes. It is unlikely therefore that this explains the scenario between samples 10 and 11.

Given that sample 10 is an OOC sample and sample 11 is a PRE sample (Olympic Games of 2012) the disparity in Hb and retic measures between these two samples requires explanation.

Observation 4

A probable doping scenario is also reflected in the ABP files in which Hb (99%), reticulocytes (99.58%), OFF- scores (99.91%) and ABPS (100%) reflect high probabilities for doping”;

and reached the following conclusion and recommendation:

“The author believes that the high variability in Hb measures (21.2%), the high and out-of-context retic level of sample 6 combined with the disparity in Hb and retic levels between samples 10 and 11 and the high probabilities as assessed by the ABP profile are suggestive of current and previous exogenous erythropoietic stimulation and/or blood transfusion.

In the absence of any possible underlying medical conditions and/or other reasonable explanations the author of this report recommends that this case be considered for an Anti-Doping Rule Violation under the WADA code 2.2 – Use of a Prohibited Substance or a Prohibited Method”;

- ii. Dr Mario Zorzoli⁶ indicated on 27 November 2014 that “the data of the athlete bear several abnormal features” for the following reasons:

“Abnormal HGB sequence

The athlete shows two distinct set of values (Fig.1): the 6 values which are related to competitions (samples collected either pre-competition or in-competition, C on the graphic) from 2009 to 2012 (samples 1, 2, 3, 5, 6, 10) are within 14.2 and 16.0 g/dL, with a mean value of 14.75 g/dL, while the 4 values of samples collected out-of-competition (O on the graphic), between 2011 and 2012 (samples 4, 7, 8, 9) are within 13.2 and 14.5, with a mean value of 13.85 g/dL. This difference of means of 0.9 g/dL, and especially the difference of 2.8 g/dL between samples 4 and 10 don't seem to be normal. It is also important to mention that usually in endurance disciplines it is known that during the period of the season when the athlete is competing, HGB values should be lower because of the increased plasma volume secondary to the augmented training and exercise workload (“Plasma volume expansion usually occurs with acute endurance exercise and endurance training both in humans and in animals. In most cases, the increase in plasma volume is associated with lower haematocrit”. ...).

What is also striking is the difference that exists of the HGB values among samples collected at the same period of the year, but in different years, with the highest sample just at the time of the London Olympic Games:

14.8.2009 14.6 g/dL

27.7.2010 14.2 g/dL

20.7.2011 14.4 g/dL

26.8.2011 14.5 g/dL

3.8.2012 16.0 g/dL

If the HGB values were quite constant between 2009 and 2011, why all the sudden it increases to reach its highest value just prior to the biggest sport event of the whole period included in the profile? This difference of more than 1.8 g/dL between 2010 and 2012 is abnormal.

%RET and %OFF sequence

The sequence of %RET shows some abnormalities. Most of the samples collected out-of-competition have %RET values at around 1.10% (samples 7, 8, 9), while most of those which have been collected in relation to competitions have values around 0.65% (samples 1, 2, 3, 6, 10). This difference is not normal (Fig. 2), and associated to higher HGB values in competition, leads to a large difference of OFF

Such a high variability of the registered %RET and OFF values leads to a sequence which displays a high statistical degree of abnormality.

It is also worth mentioning the values of the Immature Reticulocyte Fraction (IRF), which is an early marker for evaluating the regeneration of erythropoiesis. In fact, whereas the IRF percentage increases after only a few hours, the reticulocyte count increases after two to three days. Reference range for IRF is 1.5 – 13.7%.

We observe that the athlete has low values at around 2% in the samples collected at the time of competition, while higher values in the out-of-competition samples, at around 8%. This confirms the fact that at the time of the competition the bone marrow is less stimulated to produce reticulocytes, which is also

⁶ Geneva, Switzerland. Dr Zorzoli is *inter alia* health manager at the International Cycling Union (UCI).

demonstrated by the high OFF values. On the contrary, sample 5, which shows the highest %RET value at 1.85%, displays a high value of IRF at 12.8% which is a clear sign of active bone marrow stimulation. It is to be reminded the meaning of an elevated OFF parameter: OFF value is elevated as the consequence of a previous blood manipulation which increased the number of circulating red cells, and therefore HGB, either by ESA or by transfusions. To counteract this change in the body homeostasis, the organism reacts by shutting down its own production of red cells (negative feed-back) which is evidenced by the suppressed number of %RET. Consequently, such a combination of elevated HGB and suppressed %RET is not normally found in nature, and cannot be the consequence of a medical condition.

Sample 5

More in details, sample 5 shows an abnormal high %RET value of 1.85%, well above the expected limit for this athlete, and significantly different from all those which were collected before, with a % change of 189% from sample 4. Likewise, sample 6, which was collected a few weeks after, is also considerably different, because it is in the same range of samples 1-4. Such an abnormal value is not the consequence of a loss of red cells. In fact HGB is quite stable when compared to the sample collected on May 16 2011, which was not taken into account because of the delay of 49.5h, although it is known that such a delay has not effect on the HGB value. Likewise, exposure to altitude doesn't seem to be the reason for such elevated value of %RET, because despite similar exposure (samples 6 and 10) has not lead to such an abnormal value. On the contrary, samples 6 and 10 were among the lowest %RET values measured in this athlete. It seems therefore to have been the consequence of a blood manipulation like the use of erythropoiesis stimulating agents.

Sample 10

Sample 10 shows the highest value of HGB (16.0 g/dL), above the calculated limit close expected for this athlete. Interesting, such a high value has been found on a sample collected during the major sport event (London Olympic Games). Additionally, it gave also the second lowest RET%, leading to the highest OFF value, which was also beyond the expected limit. Such a result can therefore be the consequence of a blood manipulation, either the previous use of erythropoiesis stimulating agents or blood transfusion.

Conclusions

The main elements of abnormalities of this profile are the elevated values of HGB at time of competitions when compared to out-of-competition samples. Additionally, the highest HGB value was measured at the time of the London Olympic Games, which was the main sport event for this athlete in the period between 2009 and 2012. It is even more striking when considered that such elevated values of HGB are almost consistently associated with low %RET and IRF, with the consequence of elevated OFF values above the population limit (sample 1) or the expected calculated limits for this athlete (samples 2 and 10).

It is therefore my opinion that the likelihood of these abnormalities being due to blood doping, such as the use of ESA and/or blood transfusion is very high. In contrast, the likelihood of such deviations being caused by a medical condition, altitude exposure or any other condition is low. As such, I therefore recommend requesting the athlete's explanations for her blood values.

Such a scenario is consistent, outside an alternative credible explanation from the athlete, with the evolution of haematological parameters observed when blood doping is administered (blood transfusion and/or erythropoiesis-stimulating agents). Additionally, the results of sample 10 corroborate this hypothesis”;

- iii. Professor Pavel Vorobiov⁷ stated on 9 December 2014 the following opinion:

“Estimation of blood profile

The profile demonstrates the different fluctuations of ABP parameters in different samples. The values of the HBG stay at within the normal range for women 120-160g/L. The values of RET% also stay all within reference range for females 0,5-2,5%. But values of OFF-score in samples No 1, 2, 7 and 11 (98,0; 101,9; 95,9 and 112,4 respectively) are higher than normal range (normal range for women 37,2-94,0), it requires an explanation.

The overall variability in hemoglobin (HGB) measures is 21,2 % (132 – 160 g/L). It has been documented that variations in HGB exceeding 15% between blood samples from elite endurance athletes would be indicative of blood manipulation. The fact attracts attention, that regular level of HGB is 132-148g/L in the most of samples, but in pre-competition sample No11 – the HGB is 160g/L (before the Olympic Games).

The using of hypoxic tent may be accompanied by the reticulocytosis, as when climbing at altitude. However we can see that values of RET% different between them in period of using hypoxic tent: from 0,67% and 0,63% (in samples No7 and No 11) to 1,85% in sample No6. The RET% measure in sample No6 associated with the lowest value OFF-score (62,4) in all profile. The pattern between samples 10 and 11 (3 months) demonstrates an increase in HGB of 15 g/L (145 to 160 g/L) and decreasing reticulocyte values from 1.04 % to 0.63% resulting in a very high OFF-score in sample 11 in particular (112.4) which is significantly above the normal range high limit of 94.0, and it requires an explanation. In normal healthy individuals increasing HGB levels is associated with normal and/ or increased reticulocyte levels. Such abnormal combination of blood parameters may be explained by blood transfusion (increase of HGB with decrease of RET%), whereas hypoxic stimulation is accompanied with increase of RET. Also the same picture may be a consequence of termination of using of hypoxic tent, but that version is quite unlikely because hypoxic tent has short stimulatory effect on erythropoiesis. Moreover the parameters of hypoxic effect are unknown. The pattern of increase level of hemoglobin accompanied with decreased level of RET% is possible when using EPO during certain period before autobleed or (it is more possible) blood transfusion.

Conclusion

The main abnormality of this profile ... present in all taken samples. These changes remain normal range, but when these are compared with similar values of nearby samples we can see that these changes are not physiological.

The author of this report believes that revealed changes are the result of blood manipulations and it is most likely, that submitted profile is a result of use prohibited methods of stimulation of erythropoiesis.

In the absence of any possible underlying medical conditions and/ or other reasonable explanations the author of this report believes that these changes of parameters of blood, according to the WADA ABP Operating Guidelines, Version 4.0, considering the information within the RUSADA, recommends this case as use prohibited substance or prohibited method for stimulation of erythropoiesis”.

16. On 11 December 2014, RUSADA informed the Athlete that, based on the further expert review, it was proceeding with a disciplinary case against her based on the atypical profile in her

⁷ Professor, Department of Hematology and Geriatrics, First Medical University in Moscow.

ABP, and gave the Athlete an opportunity to provide an explanation in that respect.

17. On 30 January 2015, the Disciplinary Anti-Doping Committee of RUSADA (the “Anti-Doping Committee”) held a hearing in the Athlete’s absence. The IAAF was not a party to the RUSADA proceedings and was not asked to participate in the proceedings.

18. On 20 January 2015, the Anti-Doping Committee issued the decision No. 8/2015 (the “Decision”), which, in its unchallenged English translation, reads as follows:

- “1) *The Athlete YULIYA ZARIPOVA is found guilty of anti-doping rule violation (Art 32.2. (b) of the IAAF Anti-Doping Rules which were in force on the date of anti-doping rule violation);*
- 2) *The Athlete YULIYA ZARIPOVA is declared ineligible for a period of 2 (two) years and 6 (six) months commencing from 25 July 2013 according to the Art 40.6 of the IAAF Anti-Doping Rules which were in force on the date of anti-doping rule violation.*
- 3) *Pursuant to the Art 40.9 of the IAAF Anti-Doping Rules which are in force from 1 January 2015 and taking into account fairness and proportionality the competitive results of the Athlete YULIYA ZARIPOVA are declared disqualified within the following periods:*
 - *20 June 2011 – 20 August 2011;*
 - *3 July 2012 – 3 September 2012”.*

19. In the Decision, the Anti-Doping Committee found that the anti-doping rule violation described in Article 32.2(b) of the applicable version of the IAAF ADR [“*Use or Attempted Use by an Athlete of a Prohibited Substance or a Prohibited Method*”] had been committed, and sanctioned the Athlete with a period of ineligibility in the measure it found proper and proportionate, starting from the date of the provisional suspension. With respect to the “selective” disqualification of results imposed in the Decision, the Anti-Doping Committee reasoned as follows:

- “45. *Pursuant to Art. 40.8 IAAF Anti-Doping Rules which were in force in 2009-2012 (hereinafter referred as “Old IAAF ADR”), i.e. within the period when the IAAF was collecting the blood samples for ABP purposes, all competitive results of the Athlete from the date of anti-doping rule violation through the date of provisional suspension shall be disqualified.*
46. *In the meantime, on 1 January 2015 new IAAF Anti-Doping Rules entered in force (“New IAAF ADR”) where the results disqualification rules have been amended. In New IAAF ADR this provision contains additional clause which requires to disqualify all competitive results of the Athlete “unless fairness requires otherwise”.*
47. *The Commission notes that although the New IAAF ADR were not effective in 2009-2012, the Commission is entitled to apply it in the present matter on the basis of “lex mitior” which is foreseen by the Art 49 of the New IAAF ADR.*
48. *“Lex mitior” allows the hearing body to apply the rules which entered in force after an anti-doping rule*

violation had been committed provided that such rules establish more preferable position for a person which is subject to disciplinary proceedings. Thus, the Commission suggests that the New IAAF ADR contain more preferable position for a person under disciplinary proceedings allowing to disqualify competitive results unless fairness requires otherwise.

49. *Then, the Commission shall set up an approach for disqualification of results with “fairness” principle. In this regard the Commission has to refer again to the CAS jurisprudence in similar cases in sports other than athletics which rules allowed heretofore to “selectively” disqualify competitive results of the athletes obtained after the date of anti-doping rule violation.*
 50. *In CAS 2010/A/2235 [...] the CAS Panel ruled that the disqualification shall be applied only to those results which were likely to be affected by the anti-doping rule violation.*
 51. *In furtherance of this approach the CAS Panel determined the samples which showed abnormal blood values and disqualified the results which had been obtained in the period between these 2 (two) samples plus 1 (one) month after the last “abnormal” sample.*
 55. *The Commission suggests that this rationale slightly amended keeping in mind peculiarities of this case may serve as a basis for disqualification of results in the present matter as well. The Commission has thoroughly examined the opinions of 6 IAAF and RUSADA experts and determined the samples with abnormal blood values. Given that anti-doping organization shall have the burden of proof when establishing an anti-doping rule violation and the standard of proof shall be greater than mere balance of probabilities but less than beyond reasonable doubt, the Commission decides to consider as “abnormal” the samples which contained abnormal values according to the opinions of not less than 5 experts.*
 56. *Under such approach the Commission declares abnormal the samples #6 (20 July 2011) and #11 (3 August 2011). Therefore, the Commission according to “fairness” principle shall obligatory disqualify the competitive results of the athlete within the period which commences 1 month prior to the date of abnormal sample and ends 1 month after the date of abnormal sample, and other results which may be affected by the anti-doping rule violation”.*
20. The Decision was notified to IAAF, with an English translation, on 9 February 2015.

2. THE ARBITRAL PROCEEDINGS

2.1 The CAS Proceedings

21. On 25 March 2015, IAAF filed a statement of appeal with the CAS, pursuant to Article R48 of the Code of Sports-related Arbitration (the “Code”), to challenge the Decision, naming ARAF and the Athlete as respondents.
22. The statement of appeal had attached 2 exhibits and contained the designation of Mr Romano Subiotto, QC as an arbitrator.

23. On 1 April 2015, the CAS Court Office forwarded to ARAF and the Athlete the Appellant's statement of appeal. In the letter to the parties, the CAS Court Office noted that distinct appeals had been brought by IAAF to challenge decisions rendered by RUSADA in disciplinary proceedings regarding different athletes with regard to their atypical ABP profiles (the "Other Appeals"), which had been registered as follows:
- CAS 2015/A/4005, *International Association of Athletics Federations (IAAF) v. All Russia Athletics Federation & Sergey Kirdyapkin*
 - CAS 2015/A/4007, *International Association of Athletics Federations (IAAF) v. All Russia Athletics Federation & Sergey Bakulin*
 - CAS 2015/A/4008, *International Association of Athletics Federations (IAAF) v. All Russia Athletics Federation & Olga Kaniskina*
 - CAS 2015/A/4009, *International Association of Athletics Federations (IAAF) v. All Russia Athletics Federation & Valeriy Borchin*
 - CAS 2015/A/4010, *International Association of Athletics Federations (IAAF) v. All Russia Athletics Federation & Vladimir Kanaikin*
- and invited the parties to inform the CAS Court Office whether they agreed to submit the case regarding the Athlete to the same Panel to be appointed also for the Other Appeals.
24. On the same day, 1 April 2015, the CAS Court Office informed RUSADA that an appeal had been lodged against the Decision in the case concerning the Athlete and indicated that the appeal had not been directed at RUSADA. The CAS Court Office, at the same time, informed RUSADA that, if it intended to participate in the arbitration, it had to file with CAS an application to this effect.
25. On 10 April 2015, RUSADA confirmed, in a letter to the CAS Court Office, that it was ready "to participate as a party in this case to defend its decision".
26. On 15 April 2015, the First Respondent informed the CAS Court Office that it agreed to the participation of RUSADA in this arbitration and that the case of the Athlete be submitted to the same Panel appointed for the Other Appeals.
27. On 17 April 2015, the Appellant indicated to the CAS Court Office that it had no objections to the intervention of RUSADA in this arbitration.
28. On 20 April 2015, the CAS Court Office advised the parties that RUSADA was considered as a party to the arbitration.
29. In another letter dated 20 April 2015, the CAS Court Office noted that the parties in the Other Appeals had appointed Mr Mika Palmgren as an arbitrator. As a result, it invited the Respondents to inform the CAS Court Office whether they agreed to the appointment of Mr Palmgren also in this arbitration.

30. On 20 April 2015, the First Respondent agreed to the appointment as an arbitrator of Mr Palmgren.
31. On 27 April 2015, RUSADA also agreed to the appointment of Mr Palmgren.
32. In a letter of 29 April 2015, the CAS Court Office invited the Second Respondent to express her position with regard to the appointment of Mr Palmgren as an arbitrator, and indicated that her silence would be construed as an acceptance.
33. On 4 May 2015, within an extended deadline, the Appellant submitted its appeal brief, in accordance with Article R51 of the Code, together with 26 exhibits, which included, *inter alia*, an additional expert opinion dated 15 March 2015 (the “Joint Expert Report”) jointly signed by Professor Schumacher, Professor d’Onofrio and Professor Audran, the authors of the Initial Review.
34. On 8 May 2015, the Appellant’s appeal brief was forwarded to the Respondents. Correspondence then followed with respect to the deadline for the submissions of the Respondents’ answers.
35. On 8 June 2015, the CAS Court Office was informed of the appointment of the Second Respondent’s counsel.
36. On 14 July 2015, the CAS Court Office informed the parties that, on behalf of the President of the CAS Appeals Arbitration Division, the Panel appointed to hear the case of the Athlete as well as the Other Appeals had been constituted as follows: Prof. Luigi Fumagalli, President of the Panel; Mr Romano Subiotto, QC and Mr Mika Palmgren, arbitrators.
37. The Respondents, within extended deadlines, submitted their answers, in accordance with Article R55 of the Code, as follows:
 - i. on 11 July 2015, the First Respondent filed its answer, with no exhibits attached;
 - ii. on 24 August 2015, the Second Respondent filed her answer, together with 30 exhibits, including an expert report signed by Mr Paul Scott;
 - iii. on 10 July 2015, the Third Respondent filed its answer, together with 6 exhibits.
38. In a letter of 25 September 2015, the parties were informed that the Panel had decided to hold a hearing in Lausanne, Switzerland, on 2 and 3 December 2015.
39. On 13 November 2015, the CAS Court Office transmitted to the parties a draft hearing schedule, indicating that at the hearing the case of the Athlete, as per her express request, would be discussed separately and not simultaneously with the discussion on the Other Appeals.
40. Correspondence was then exchanged between the parties as to the organization and the schedule of the hearing.

41. On 24 November 2015, and for such purposes, a conference call was held with the participation of the President of the Panel and the parties' counsel. During this conversation, the parties agreed that the case of the Athlete would be heard on a different date, and therefore that on 2 and 3 December 2015 only the Other Appeals would be discussed. In that respect, and as a result, the President of the Panel made it clear that, in order to safeguard the integrity of all proceedings, the award in the Other Appeals would be issued only after the case regarding the Athlete was heard, even though it was clear that every case would be decided on the basis of its specificities, and of the parties' respective pleadings and evidence.
42. As a result, the Panel, in a letter dated 24 November 2015, advised the parties that the hearing scheduled to take place on 2 and 3 December 2015 was cancelled and postponed to another date.
43. In a letter dated 15 December 2015, the Appellant drew the Panel and the other parties' attention to a new legal argument that it intended to submit at the hearing, regarding the application of the "*lex mitior* principle" in this case.
44. In a letter dated 16 December 2015, the Second Respondent reacted to the Appellant's letter of 15 December 2015, requesting the Panel to dismiss the new line of reasoning therein mentioned, as inadmissible under Article R56 of the Code.
45. On 18 December 2015, the CAS Court Office informed the parties that the Panel had decided to hold a hearing in Lausanne, Switzerland, on 26 February 2016.
46. On 17 February 2016, the CAS Court Office, on behalf of the President of the Panel, issued an order of procedure (the "Order of Procedure"), which was accepted and countersigned by all parties.
47. A hearing was held in Lausanne on 26 February 2016, as per the notice in the letter of 18 December 2015. The Panel was assisted by Mr Fabien Cagneux, Counsel to CAS. The following persons attended the hearing:
 - i. for the Appellant: Mr Nicolas Zbinden and Mr Ross Wenzel, counsel;
 - ii. for ARAF Mr Artem Patsev, counsel;
 - iii. for the Athlete the Athlete in person, assisted by Mr Mike Morgan, Mr Howard Jacobs, Ms Yama Otung, counsel, and Ms Olga Kamardina, interpreter;
 - iv. for RUSADA Ms Anna Antseliovich, Head of the RUSADA Results Management Department.
48. At the hearing, after the opening statements of the parties, Professor Schumacher, Professor d'Onofrio and Mr Paul Scott, *i.e.* experts who had signed written opinions with respect to the Appellant's case, were heard.

49. The contents of the declarations of the experts can be summarised as follows⁸:
- i. Professor Schumacher confirmed the opinion expressed in the Initial Review and in the Joint Expert Report and explained that EPO increases an athlete’s maximal oxygen uptake (the “VO_{2max}”) by 1% to 4% for a period of up to 4 weeks after the erythropoiesis stimulation, depending on the dosage of its administration, and confirmed that the use of micro-doses over a longer period can produce long-lasting effects. At the same time, Professor Schumacher indicated that manipulation is possible to rapidly and significantly decrease the HGB values, by infusing plasma expander. Without manipulation, HGB values drop 6 to 10 days after the end of the stimulation phase. Professor Schumacher, then examined the Athlete’s ABP indicating, *inter alia*, that also samples 1 and 2 are not normal and that sample 6 shows a pattern of prolonged stimulation (in light of its values, inconsistent with a single administration), with sample 7, marked by a drop in RET%, marks a “suppression” phase. In the same way, according to Professor Schumacher, the sequence shown by the Athlete’s blood values mentioned by Mr Scott in his opinion is not normal;
 - ii. Professor d’Onofrio also confirmed the opinion expressed in the Initial Review and in the Joint Expert Report, and his agreement with the declarations rendered by Professor Schumacher, chiefly with respect to the possibility to manipulate HGB values;
 - iii. Mr Scott confirmed his written opinion dated 24 August 2015 regarding the Athlete’s ABP and “*the effect of blood manipulation on subsequent results*”, which included a table supplementing the ABP examined in the Initial Review and the Joint Expert Opinion (§ 9 above) to include additional blood samples and their biomarkers⁹. Only on one point Mr Scott declared that such opinion had to be corrected: following a question asked by the Appellant, Mr Scott agreed that the values shown by some of such samples do appear to be normal. At the same time, Mr Scott underlined that, in his opinion, the Appellant’s experts’ conclusions about what the Athlete did or could have done are speculative in nature and are based on too limited data, while it is possible that a single administration of EPO had taken place before the collection of the samples declared to be abnormal by the Decision.
50. During the hearing, the parties specified their arguments in support of their respective petitions.

⁸ This summary does not necessarily follow the order of presentation of the experts and intends only to give an indication of a few points touched at the hearing. The Panel, however, considered the entirety of the declarations rendered at the hearing.

⁹ The additional data are the following:

	COLLECTION DATE	RET [%]	HGB	OFF-SCORE
12	12.12.2012	0.86	13.9	83.40
13	18.03.2013	1.71	14.9	70.50
14	03.05.2013	1.20	14.2	76.30
15	06.07.2013	1.09	13.7	74.40
16	30.10.2013	1.59	14.2	66.30

In that context, *inter alia*:

- i. the Appellant underlined, in general terms, the effects of blood doping and the impact of EPO administration on sporting performances and on training as a result of the improvement it causes on the athlete's VO_{2max} . With specific reference to the Athlete, then, only doping practices could explain the highly atypical profile of her ABP, showing fluctuations in its values, and a suspicious increase in OFF scores around major competitions. The values reported by Mr Scott and relating to 2013 are also abnormal. Finally, the Appellant contended (as announced in the letter dated 15 December 2015: § 43) that the "fairness exception" to the disqualification of results could not be applied to the Athlete's case as a matter of law, since the application of the *lex mitior* principle does not allow "cherry-picking" and cannot result in the creation of non-existing rules. In that regard, reference was made to a judgment rendered on 18 July 2013 by the European Court of Human Rights (Grand Chamber) in the case of *Maktouf and Damjanovic v. Bosnia and Herzegovina*, and to a decision of the Swiss Federal Tribunal (ATF 119 IV 145) of 25 June 1993. In any case, in the Appellant's opinion, the Athlete cannot benefit from the "fairness exception", since she was involved in repeated, intentional and severe anti-doping rule violations;
 - ii. the First Respondent confirmed that the Decision correctly and fairly applied the relevant rules, including the *lex mitior* principle, and properly took into account the limited temporal effect of EPO administration. In any case, according to ARAF, IAAF failed to prove its contentions;
 - iii. the Second Respondent underlined that her case is not the same as the case of the other Russian athletes involved in the Other Appeals, since she belonged to a different group. In any case, the "fairness exception" had to be applied to her case, in light of its general nature, the necessity of its broad interpretation, the CAS jurisprudence and the *lex mitior* principle: there is no evidence that she underwent continuous doping practices; and it would not be fair to disqualify results not affected by doping. Finally, the Second Respondent referred to the CAS jurisprudence to emphasize that the Panel's power of *de novo* review of the facts and the law should be exercised to review decisions only when they are clearly disproportionate or misplaced. Therefore, the Decision, which struck a fair and reasonable balance between competing interests, should not be set aside
 - iv. the Third Respondent emphasised that the "fairness exception" had been properly applied to the disqualification of results in this case, also to avoid disproportionate consequences to the Athlete.
51. At the conclusion of the hearing, after making closing submissions summarizing their respective cases, the Athlete herself rendered a declaration denying having undergone doping practices and underlining the devastating effects that the sanction produced on her life and career. The parties, then, expressly stated that they did not have any objection in respect of their right to be heard and to be treated equally in the arbitration proceedings.

2.2 The Position of the Parties

52. The following outline of the parties' positions is illustrative only and does not necessarily comprise every contention put forward by the parties. The Panel, indeed, has carefully considered, for the purposes of the legal analysis which follows, all the submissions made by the parties, even if there is no specific reference to those submissions in the following summary.

a. *The Position of the Appellant*

53. The IAAF submitted the following prayers for relief in the merits:

- “(i) the IAAF’s appeal is admissible;*
- (ii) the decision of the RUSADA Commission not to disqualify Ms Zaripova’s results at the 2011 World Championships in Athletics on 30 August 2011, the IAAF Diamond League Meeting on 16 September 2011 and the 2013 Summer Universiade on 10 July 2013 be set aside; and*
- (iii) all competitive results obtained by Ms Zaripova from the date of first commission of the anti-doping rule violation (20 July 2011) through to the commencement of her provisional suspension on 25 July 2013 be disqualified, with all resulting consequences in accordance with IAAF Rule 40.9; or*
- (iv) in the alternative, all competitive results obtained by Ms Zaripova from the date of first commission of the anti-doping rule violation (20 July 2011) through to the date of last commission of the anti-doping rule violation (3 August 2012) plus an additional period of one month be disqualified, with all resulting consequences in accordance with IAAF Rule 40.9; or*
- (v) in the further alternative, all competitive results obtained by Ms Zaripova that are likely to have been affected by anti-doping rule violations be disqualified (including the 2011 World Championships in Athletics on 30 August 2011 and the IAAF Diamond League Meetings on 16 September 2011 and 17 August 2012), with all resulting consequences in accordance with IAAF Rule 40.9; and*
- (vi) the ARAF and Ms Zaripova are ordered to pay the IAAF the costs that it has incurred in bringing this appeal”.*

54. As already mentioned, IAAF challenges the Decision on only a single point. According to IAAF, in fact, the appeal is not about whether the Athlete has committed an anti-doping rule violation under the IAAF ADR, or about the appropriate period of ineligibility to be imposed on the Athlete for such anti-doping rule violation: *“the sole issue in this appeal concerns the further consequences of Ms Zaripova’s repeated blood doping in terms of the disqualification of her results in competitions in which she successfully participated both in and following the relevant period 2011-2012 in which she doped”*. In that regard, IAAF notes that *“this is of no little significance ... because ... Ms Zaripova won both World and Olympic titles in that period”*. In the Appellant’s opinion, all results from 20 July 2011 onwards (the date on which the Athlete first committed an anti-doping rule violation) should be annulled, without exceptions, pursuant to Article 40.9 of the IAAF ADR.

55. IAAF considers that the “fairness exception” set forth in Article 40.9 of the IAAF ADR, as contained in Chapter 3 of the IAAF Competition Rules in their 2015 edition (the “2015 IAAF

ADR”), should not apply to the Athlete’s case for the following reasons:

- i. even though the IAAF accepted in its appeal brief that “*the RUSADA Commission’s determination that ... the rule against which the issue of the disqualification of ... results is to be examined, is Rule 40.9 of the 2015 edition of the IAAF Rules*”, at the hearing the IAAF argued that the “fairness exception” set forth in Article 40.9 of the 2015 IAAF ADR cannot be applied to the Athlete’s case as “*a matter of law*”, noting that the IAAF ADR, as contained in Chapter 3 of the IAAF Competition Rules in the 2009 edition (the “2009 IAAF ADR”)¹⁰, apply under the “*tempus regit actum principle*” to determine the duration of the applicable ineligibility period, at 3 years and 2 months, pursuant to Articles 40.2 and 40.6 thereof, while Article 40.2 of the 2015 IAAF ADR would have required an ineligibility for 4 years. By contrast, the 2015 IAAF ADR apply with respect to the issue of the disqualification of results under the “*lex mitior*” principle, which is invoked as a justification for the application of the “fairness exception” set forth in Article 40.9 thereof. In the Appellant’s opinion, the application of different editions of the IAAF ADR to distinct aspects of the sanction is not consistent with a correct understanding of the “*lex mitior*” principle. This principle requires a comparison of different sets of rules, and the application in its entirety of the more favourable set to the accused, but cannot result in the artificial creation of a non-existent system of rules, composed of provisions belonging to different sets. In support of such contention, the Appellant refers to a judgment rendered on 18 July 2013 by the European Court of Human Rights (Grand Chamber) in the case of *Maktof and Damjanovic v. Bosnia and Herzegovina* and to a decision of the Swiss Federal Tribunal (ATF 119 IV 145) of 25 June 1993;
- ii. in any case, there are no grounds for the “fairness exception” to apply in the case of an athlete (like the Athlete) who engaged in intentional, serious and repeated acts of doping over a long period of time. In the Appellant’s opinion, the Athlete is not an innocent competitor, who inadvertently ingested a stimulant on a single occasion; this is the case of an athlete who engaged in intentional and carefully planned blood doping in connection with her preparation for major international competitions (and chiefly the 2011 World Championships and the 2012 Olympic Games) and deprived clean competitors of the opportunity to earn medals at such competitions. In support of this conclusion, the Appellant refers chiefly to the expert opinions in the Initial Review and in the Joint Expert Report, in which Professors Schumacher, d’Onofrio and Audran answered the questions asked by IAAF as follows:

¹⁰ It is in that respect to be underlined, as the parties acknowledged in their submissions, that the subsequent editions of the IAAF Competition Rules, of 2010-2011 and of 2012-2013, in force before the 2015 IAAF ADR became applicable, contained anti-doping rules identical to those set by the 2009 IAAF ADR. Therefore, for ease of reference, any mention to the 2009 IAAF ADR shall be intended to cover also those editions which followed them, pre-dating the 2015 IAAF ADR.

“1. Please describe your experience of the types of doping protocols and practices that are known to be used by athletes engaged in blood doping in order to avoid detection by regular doping controls.

Illicit manipulation of the blood is aimed at increasing the capacity of the blood to transport oxygen to body tissues, such as the muscles. According to the scientific literature, experimental research, athletes' admissions, police requisitions and investigations, witnesses in trials, as well as court decisions and awards, there are two main types of blood doping: Injection of erythropoietic stimulating agents (ESA), such as recombinant human erythropoietin (EPO), and blood transfusion. These methods can be used separately or in combination, using different strategies.

EPO is the synthetic pharmacologic equivalent of the human, endogenous molecule produced by kidneys to maintain a constant red blood cell count and haemoglobin mass in the circulation. EPO stimulates proliferation and survival of the bone marrow precursors that produce red blood cells. EPO is a potent drug: Its administration to healthy subjects produces well identifiable haematological changes in the peripheral blood. During the drug intake, plasma volume decreases and red cell mass increases, thus producing marked increments in the concentration of (young) red blood cells (reticulocytes) and haemoglobin concentration in the peripheral blood. Administration of ESA also results in suppression of endogenous EPO production, with a subsequent reduction in the percentage of circulating reticulocytes, which occurs once ESA administration stops. The duration of these effects is a function of dosage and frequency of administration.

Variable dosages and time schedules are utilized. A classical method consists of injections of 4000 IU (about 60 IU/kg) of EPO one to three times per week. Other ESAs such as CERA and Darbopoietin have been used as doping agents after their commercial introduction in the early 2000s, but they are easily detectable due to their longer half-life time in urine and blood. Thus, first generation EPO still appear to be the most common among cheating athletes, given their short window of detection (hours to days). In recent years, the intravenous (i.v.) route of administration appears to be preferred to subcutaneous injections, for similar reasons.

As a general rule, the stimulation phase with regular ESA dosages is carried out relatively far from the time of competitions, at least six or more weeks before, to increase haemoglobin mass and avoid detection by direct testing. In some cases, the scope of such blood boosting periods is to withdraw and collect blood for autologous transfusion (this happens in the months far from races, such as in winter for summer sports). In a classical research study ..., full EPO dose was given every day subcutaneously for 26 days: Haemoglobin and haematocrit were still higher 14 days after the end of treatment compared to before treatment. A typical EPO cycle lasts for around 6 weeks: A loading phase with 20-40 IU/kg i.v. for 2 weeks, then six weeks with reduced doses (10 IU/kg i.v.). In a recent study ..., subjects received a standard dose of epoietin beta (50 IU/kg) twice a week for three weeks: Haemoglobin increased by 0.6-1.8 g/dL in the different subjects. The higher haemoglobin level was then maintained for several weeks with twice weekly microdose injections of 10 IU/kg body weight. In another study ..., standard doses of EPO (60 IU/kg three times a week) were given for the first 3 weeks, and then reduced (20 IU/kg) for the next 5 weeks: Haematocrit increased during the first 3 weeks and was durably increased thereafter during

the low-dose period and for more than 2 weeks during the wash-out phase, where no drug administration occurred. There is a general agreement among the authors of recent studies that small doses of EPO (about 10 IU/kg) are hardly detectable by direct detection methods but are sufficient to maintain a supraphysiologically increased red cell mass. Depending on the duration and dosage of administration, red blood cell mass increases by about 10- 15% with EPO, i.e. from a haemoglobin concentration of 14.5 to 16.0 g/dL. This effect is manifest after two to three weeks of administration and is partly caused by an EPO-triggered decrease in plasma volume, in association with the well-known increase of red blood cell mass. Once EPO is discontinued, a progressive return of haemoglobin concentration towards baseline occurs, starting ~two weeks after cessation of the intake. The apparent drop in haemoglobin is initially related to the restoration of plasma volume, with less effect on the red cell mass, which, given the longer survival of circulating red blood cells, remains elevated and maintains an improved transport capacity for oxygen

Masking strategies are also used to avoid detection of ESA through direct tests. For instance, athletes can “miss” one or two tests during the period of full-dose injections without sanction. Urine can be diluted by fluid intake or i.v. infusion of albumin and other substances. According to recent athletes’ admissions, EPO is also used very close or even during competition periods: Microdoses can be injected i.v. late in the evening. Due to its short half-life and helped by large amounts of fluid intake, positive findings in conventional tests conducted the next day are likely negative.

Blood transfusion is an old technique, which has recently been reintroduced as a substitute or an addition to EPO administration to avoid laboratory detection of this molecule. While transfusion of homologous (=another human) donor’s blood can currently be detected through a direct laboratory test, autologous (=the persons own) blood transfusion is still undetectable and can be only identified through suspicious blood changes in an athlete’s profile The practice of autologous blood transfusion requires two different actions: Firstly, the blood must be collected through phlebotomy, similar to a donation of blood. This reduces the mass of circulating red blood cells and haemoglobin, thus activating an increase of endogenous EPO production. This stimulates the production of new erythrocytes in the bone marrow, thus restoring circulating haemoglobin mass in a few weeks. The cheating athlete then reinfuses his own blood before a competition, to increase the haemoglobin mass and improve oxygen transport. The withdrawal is usually carried out with a certain time interval from important competition, to avoid reduced exercise capacity. The second step, blood reinfusion, is performed a few days before the targeted race in order to achieve an increased red cell mass and thus optimal oxygen transport capacity. Many different and even complex strategies are used, such as boosting red blood cell mass with ESA injection before blood withdrawal, and various repeated sequences of withdrawal, reinfusion and withdrawal of progressively increasing quantities to exploit regenerative capability of the bone marrow while storing blood within the acceptable storage time limits. Microtransfusion of daily small quantities of blood has also been described, to avoid suspect changes in the blood profile.

2. Do you agree with the conclusions of the RUSADA Disciplinary Commission that samples 6 and 11 of the athlete's profile are abnormal as evidence of blood doping?

We refer to our initial reviews of the profile (Appendix 1 of your correspondence). Independently, we had identified the samples obtained on 20.6.2011 (sample 6) and 3.8.2012 (sample 11) as suspicious. Sample 6 displays a typical stimulation pattern, sample 11 shows features of erythropoietic suppression, such as typically observed when red cell mass is supraphysiologically increased (see response to first question above).

Thus, we agree with the conclusion of the RUSADA Disciplinary Commission that samples 6 and 11 of the athlete's profile are evidence of blood doping.

3. If the answer to question 2 in relation to sample 6 is 'yes', do you consider that her blood doping out-of-competition on 20 July 2011 is likely to have assisted her training for or affected her performances in the subsequent competitions in which she participated at the World Championships on 30 August 2011 and in the Diamond League on 16 September 2011?

VO_{2max} is the maximal oxygen transport capacity, a measure of maximal endurance performance and the key physiological measure that is modified by EPO administration or blood transfusion through the increase of red blood cell mass. In the literature, several studies report the effect of EPO treatment on VO_{2max} several weeks after cessation of treatment ...: ... the increase in VO_{2max} is still significant 3 weeks after treatment. ... the improvement is still significant 4 weeks after treatment. ... the increase in VO_{2max} per gram of increase in haemoglobin concentration is 20 ml of O₂ per gram increase in Haemoglobin and that the results are similar to those observed after the transfusion of red blood cells. These findings were confirmed In summary, the effect of blood manipulation on VO_{2max} depends on the relative increase of haemoglobin concentration.

Relating these facts to the profile, it is obvious that the athlete was training with the beneficial effects of an increased red cell mass and thus a higher VO_{2max} in the lead up to the competitions in August and September 2011: Sample 6 clearly displayed a stimulated erythropoiesis (see previous paragraph and our initial review), meaning that red cell mass was increasing already. An increased red cell mass will have allowed her higher running speeds in training and thus greater training stimuli. Previous research has also shown that the effects of performance enhancing substances might influence the ability of the body to respond to new training impulses long after the use of such substances Although the impact of EPO on the ability to cope with training has not been scientifically examined until present, the available body of literature ... on non-haematological action of EPO underlines the high likelihood for a positive contribution”.

In other words, the Appellant underlines that “it is the unanimous opinion of the IAAF experts in this regard that it is highly likely that Ms Zaripova's blood doping on 20 July 2011 assisted her training for and participation in both the World Championships in Daegu on 26 August 2011 ... and the Diamond League meeting in Brussels on 16 September 2011”. The IAAF submits therefore

that, *“had the RUSADA Commission conducted its enquiries in an appropriate manner, it would have reached a very different conclusion even on application of its own “fairness” criteria and been obliged additionally to disqualify Ms Zaripova’s results at both the 2011 World Championships in Daegu on 26 August 2011 and the 2011 Diamond League meeting in Brussels on 16 September 2011”*;

- iii. in cases of serious, aggravated doping violations, IAAF has always sought to punish the athletes concerned to the maximum possible extent to reflect their serious offences, including the disqualification of results, and no “fairness exception” was applied. In the Appellant’s opinion, to do otherwise in the case of the Athlete would mean to act inconsistently and to send a dangerous message to the athletics community. In that respect, IAAF makes reference to the cases of:
- Kelli White, who in 2004 admitted to the repeated use of a number of performance enhancing substances and doping methods, and accepted a 2 year ineligibility sanction starting on 17 May 2004. In addition to her ineligibility, all of her competitive results from 15 December 2000 onwards were disqualified and she forfeited her World Championship titles in 2003;
 - Marion Jones, who in 2007 admitted having regularly used steroids from September 2000 through to July 2001 (including at the 2000 Sydney Olympic Games), and accepted a 2 year sanction starting on 8 October 2007. In addition to her ineligibility, all of her competitive results from 1 September 2000 onwards were disqualified and she forfeited all of her World Championship titles, as well as the 5 Olympic medals that she won at the 2000 Olympic Games;
 - 7 Russian athletes, who in 2009 were found (through the use of DNA evidence) to have tampered with their out-of-competition urine samples by using substitute urines, and were each banned for a period of 2 years and 9 months starting from 3 September 2008. In addition, all of the athletes’ competitive results were disqualified going back to April or May 2007, when the respective tampering of the samples had taken place;
 - 37 athletes, who, since the IAAF’s introduction of the ABP program in 2009, have been found guilty of blood doping. In addition to serving their respective periods of ineligibility, all 37 athletes have, without exception, had their results disqualified as from the date of their first violation;
 - doping offenders in other sports, and namely of:
 - √ Jan Ullrich, who in 2010 was found guilty of a first anti-doping rule violation for the use of blood doping and other prohibited substances and was banned from the sport for a period of 2 years starting from 22 August 2011. As regards his career results, the Panel took the view that his involvement in Dr Fuentes’ doping program in Spain had extended back as far as the spring of

2005 and it therefore disqualified all of his results from 1 May 2005 until the time of his retirement in 2007;

√ Lance Armstrong, who in August 2012 was banned for life from the sport of cycling for his involvement in the US Postal Service Team doping conspiracy and all of his career results from 1 August 1998 were disqualified without exception, including numerous Tour de France and other international titles;

iv. only in cases of “re-testing” (such as the case of Ms Kotova mentioned by RUSADA in its submissions: § 73 below) did IAAF deviate from this approach.

56. The IAAF’s primary case, therefore, is that this Panel is not bound to apply the test adopted in the case CAS 2010/A/2235 of 21 April 2001, invoked in the Decision, namely, that it would be unfair to disqualify the Athlete’s results not likely to have been affected by the anti-doping rule violation. In the Athlete’s case, “*given the nature and seriousness of Ms Zaripova’s blood doping in the period from 2011 to 2012*”, there are no grounds for applying the “fairness exception” in Article 40.9 of the 2015 IAAF ADR. In the IAAF’s opinion, the damage that the Athlete has caused to the sport of athletics should outweigh any possible consideration of fairness in her favour. Accordingly, the IAAF submits that all of the Athlete’s results from 20 July 2011 should be disqualified.
57. In the alternative, the IAAF submits that, if the Panel were to find that the “fairness exception” in Article 40.9 of the 2015 IAAF ADR applies, the Panel should then nevertheless still disqualify (as the CAS Panel did in the case CAS 2010/A/2235) all results obtained between the first and the last identified abnormal samples in her profile, plus a period of one month following the last abnormal sample. The IAAF contends that an athlete, who makes a conscious decision to manipulate her blood, believes that she has escaped detection through routine controls, and repeats the illegal act should not have any of the results she achieved between those two (or more) episodes of manipulation recognised. Applying such an approach in the Athlete’s case, the Panel should take into account that there is a consensus of expert opinions that the first abnormal sample in the Athlete’s profile is sample 6 from 20 July 2011 and the evidence of the IAAF experts is that the last abnormal sample in the profile should be considered to be sample 11 of 3 August 2012. As a result, all of the Athlete’s results between 20 July 2011 and 3 September 2012 should be disqualified, including the results obtained at the 2011 World Championships (where the Athlete won the gold medal and became the world champion), the 2011 Diamond League Meeting and the 2012 Diamond League Meeting.
58. Finally, if the Panel were to find that the correct test is to disqualify only those of the Athlete’s results, which may have been affected by her respective violations, the IAAF submits that, in addition to the results disqualified by the Anti-Doping Committee, at a minimum the Athlete’s results at the 2011 World Championships and at the 2011 Diamond League Meeting should also be disqualified, because “*her blood doping in July 2011 is highly likely to have assisted her training for and participation in those two events*”. According to the Appellant, then, also the Athlete’s results at the 2012 Diamond League on 17 August 2012 should be disqualified “*following her undisputed blood doping at the Olympic Games in London earlier the same month*”.

b. The Position of the Respondents

b.1 The Position of the First Respondent

59. In its prayers for relief, ARAF requested the CAS to rule as follows:

- i. decision of the RUSADA Committee 8/2015 dated January, 20 [sic], 2015, is upheld;*
- ii. in any event, the ARAF shall not bear any of the costs of this arbitration;*
- iii. the Appellant (the IAAF) and/or Ms Yuliya Zaripova shall be ordered to reimburse the ARAF for the legal and other costs incurred in connection with this arbitration, in an amount to be determined at the discretion of the CAS Panel”.*

60. In other words, the First Respondent asks this Panel to dismiss the appeal brought by IAAF against the Decision, which ARAF finds to be “grounded, well-founded and reasonable”.

61. In support of such conclusion, ARAF submits the following:

- i. the Anti-Doping Committee took into account that:
 - the Athlete’s first abnormal blood sample was collected on 20 July 2011,
 - the disqualification of competitive results means that an athlete is considered as never having participated in that competition,
 - the Athlete was provisionally suspended from 25 July 2013, and later declared ineligible for 2 years and 6 months, so that the disqualification of all results from 20 July 2011 means that the Athlete would actually be suspended for 4 years and 6 months, when, according to the 2009 IAAF ADR, the maximum sanction was 4 years of ineligibility,
 - the “fairness” principle recognized by Article 40.9 of the 2015 IAAF ADR had to be applied in the Athlete’s case;
- ii. all opinions expressed by the experts appointed by IAAF and RUSADA were carefully considered, and it was decided that a sample could be considered to be abnormal only when 5 of the 6 opinions described it as being abnormal, bearing in mind the seriousness of the allegations, the burden and standard of proof and the necessity to interpret in the Athlete’s favour all doubts or uncertainties;
- iii. the Anti-Doping Committee, on such basis considered samples 6 and 11 to be abnormal;
- iv. the CAS jurisprudence allows the “selective disqualification” of competitive results. In fact, in the case CAS 2010/A/2235, the CAS Panel disqualified only those results which had been likely affected by the anti-doping rule violation, and indicated that such a disqualification might extend no more than one month after the last abnormal sample. On this basis, the Anti-Doping Committee disqualified the Athlete’s competitive results achieved during the period commencing one month before and ending one month after the date of collection of each abnormal sample.

62. As a result, in the First Respondent's opinion, the Decision was issued "*in strict compliance with the IAAF Anti-Doping Rules (ed. 2015), including 'fairness' principle, lex mitior principle, and was based on existing information, IAAF's and RUSADA's experts' opinions, CAS jurisprudence*".

b.2 *The Position of the Second Respondent*

63. In her prayers for relief, the Athlete requested the CAS to:

- "(a) dismiss the IAAF's appeal;*
- (b) order the IAAF to:*
 - (i) reimburse Ms Zaripova's legal costs;*
 - (ii) bear the costs of the arbitration".*

64. The Second Respondent argues that the appeal should be dismissed, and the Decision upheld, because:

- i. "it has been long established under CAS jurisprudence that it would be unfair to disqualify results not likely to have been affected by an anti-doping rule violation";*
- ii. "the IAAF has not presented evidence that*
 - (a) Ms Zaripova's competitive results on 30 August 2011 and 16 September 2011 were in any way affected by the abnormal blood values recorded on 20 July 2011;*
 - (b) Ms Zaripova's competitive results following the 2012 Olympic Games and during the 2013 season were in any way affected by the abnormal blood value recorded on 3 August 2012",*

while the available evidence shows the contrary, since samples collected from the Athlete before, at and shortly after the events under scrutiny were all negative and normal;

- iii. the Athlete should not suffer the consequences of the substantial delays in the results management of her case, which were outside her control and not attributable to her.*

65. Preliminarily, however, the Second Respondent makes submissions with respect to the rules that this Panel should apply in determining her case, also in light of the evolution over the time of the IAAF ADR. In such regard, the Second Respondent submits that:

- i. the rules in force at the time of the alleged violation govern the substantive aspects of the appeal, subject to the *lex mitior* principle, under which the athlete may benefit from the application of new regulations, if they are more favourable than the older regulations. Such principle applies to all substantive aspect, including the consequences of an anti-doping rule violation. As a result, the IAAF ADR in force at the time of the Decision apply to the issue of the disqualification of the Athlete's results, including the rule providing for the non-disqualification if "fairness" so requires;*
- ii. in addition, the Panel, following CAS precedents, should apply some general principles of law, which include the principles of proportionality, legitimate expectation, the duty to*

act in good faith and estoppel.

66. With regard to the rule providing for the non-disqualification if “fairness” so requires, the Second Respondent contends that the CAS jurisprudence has identified several circumstances warranting the application of “fairness”. As a result, account should be taken of:
- i. the delays in the disciplinary procedure,
 - ii. the impact of the anti-doping rule violation on subsequent competitive results, and
 - iii. whether the athlete has subsequently tested negative.

In the Second Respondent’s opinion all those elements are relevant in her case and should lead to the non-disqualification of results, contrary to the Appellant’s claim.

67. The Second Respondent in fact submits that “*Ms Zaripova’s subsequent competitive results were not affected*”. In that regard, the Athlete notes that
- IAAF does not contend that her results of 2013 were affected by the abnormal blood value recorded on 3 August 2013;
 - Mr Scott gave evidence that there is no indication from the available data that she enjoyed any benefit beyond 22 or 23 July 2011;
 - IAAF’s experts relied on studies on which test subjects were administered EPO over the course of several (4 to 8) weeks, and drew conclusions (regarding the impact of doping practices on the training ability) from a study relating to testosterone. Therefore, their conclusions are based on presumptions which do not apply in this case;
 - there is no evidence that the Athlete used EPO, and less still that she did so over a period of weeks or months. The ABP data give evidence of only one violation on or before 20 July 2011.
68. The Second Respondent, then, contends that “*Ms Zaripova tested negative before, at and after the events in question*”. More specifically, the Athlete underwent tests before, at and after the 2011 World Championships, and the 2011 Diamond League Meeting, as well as before, at and after the 2013 Universiade: all those tests returned negative results, and showed normal blood values. Therefore, fairness requires that the results obtained be maintained.
69. Finally, according to the Second Respondent “*delays in results management*” procedure occurred which are not attributable to the Athlete. Therefore, “*it would be manifestly unfair and contrary to her legitimate expectations to disrupt Ms Zaripova’s intervening results*”.
70. In summary, all elements relevant to the exercise of “fairness” under the IAAF ADR require that the Athlete’s results not disqualified by the Decision be maintained.

b.3 The Position of the Third Respondent

71. In its prayers for relief, the RUSADA requested that the CAS rule as follows:

- i. decision of the RUSADA Commission is upheld;*
- ii. if the decision of the RUSADA Commission is upheld, IAAF reimburses RUSADA all the costs;*
- iii. alternatively ARAF and Ms Yuliya Zaripova shall bear all the costs”.*

72. According to RUSADA, the disputed questions in this arbitration are:

- i. “who shall prove the principle of “fairness” (the athlete or the RUSADA commission on its own)”, and*
- ii. “if there were exceptional circumstances that required application of “fairness” principle in this case”.*

73. Concerning the first point, RUSADA underlines that Article 40.9 of the 2015 IAAF ADR provides no indications as to who bears the burden of proving the applicability of the “fairness principle” in any given case. However, RUSADA refers to the correspondence sent by IAAF in another case (the case of Ms Kotova), in which IAAF would have agreed that the “fairness principle” can be applied at the discretion of the hearing body, without any burden for the athlete to invoke or prove it.

74. Concerning the second point, RUSADA emphasizes that:

- i. “taking into consideration that the Athlete was provisionally suspended from 25 July 2013 and later declared ineligible for two years and six months, disqualification of all results from 20 July 2011 [date of collection of the first abnormal blood sample] means that the athlete would be actually suspended for four years and six months”, a period longer than the maximum sanction contemplated by the 2009 IAAF ADR (four years);*
- ii. the selective disqualification of results decided by the Anti-Doping Committee is fair both for the Athlete and the clean athletes who competed against her, since the results that were achieved by unfair means have been disqualified, while those results that were not affected by the use of prohibited substances or methods have been left untouched;*
- iii. the decision of the Anti-Doping Committee, to consider as abnormal only those samples so declared by at least five of the six experts involved were considered to be abnormal, was in line with the applicable standard of evidence imposed on the anti-doping organization to establish an anti-doping rule violation, and took into account the severity of the consequences that would have derived for the Athlete, including disqualification of results at major sporting events.*

3. LEGAL ANALYSIS

3.1 Jurisdiction

75. CAS has jurisdiction according to Article R47 of the Code, under which:

“an appeal against the decision of a federation, association or sports-related body may be filed with the CAS insofar as the statutes or regulations of the said body so provide or as the parties have concluded a specific arbitration agreement ...”.

76. The jurisdiction of CAS, in fact, is not disputed by the parties, has been confirmed by the signature of the Order of Procedure and is based on Article 42 of the 2015 IAAF ADR, in force at the time the Decision was rendered and the appeal to CAS was filed, which reads, in the pertinent parts, as follows:

Article 42 – “Appeals”

Decisions subject to Appeal

1. *Unless specifically stated otherwise, all decisions made under these Anti-Doping Rules may be appealed in accordance with the provisions set out below. All such decisions shall remain in effect while under appeal unless the appellate body orders otherwise or unless otherwise determined in accordance with these Rules Before an appeal is commenced, any post-decision review provided in these Anti-Doping Rules must be exhausted*

(a) *Scope of Review Not Limited: the scope of review on appeal includes all issues relevant to the matter and is expressly not limited to the issues or scope of review before the initial decision maker.*

(b) *CAS Shall Not Defer To The Findings Being Appealed: in making its decision, CAS need not give deference to the discretion exercised by the body whose decision is being appealed.*

Appeals from Decisions regarding Anti-Doping Rule Violations or Consequences

2. *The following is a non-exhaustive list of decisions regarding anti-doping rule violations and Consequences that may be appealed under these Rules: ... a decision imposing Consequences or not imposing Consequences for an anti-doping rule violation; ... a decision failing to impose Consequences for an anti-doping rule violation in accordance with these Rules;*

Appeals arising from International Competitions or Involving International-Level Athletes

3. *In cases arising from an International Competition or involving International-Level Athletes or their Athlete Support Personnel, the first instance decision of the relevant body of the Member shall not be*

subject to further review at national level and shall be appealed exclusively to CAS in accordance with the provisions set out below.

Parties Entitled to Appeal

5. *In any case arising out of an International Competition or involving an International-Level Athlete or his Athlete Support Personnel, the following parties shall have the right to appeal to CAS:*

(c) *the IAAF;*

Time Limits for Filing Appeals to CAS

15. *Unless stated otherwise in these Rules ..., the appellant shall have forty-five (45) days in which to file his statement of appeal with CAS, such period starting from the day after the date of receipt of the decision to be appealed (or where the IAAF is the prospective appellant, from the day after the date of receipt of both the decision to be appealed and the complete file relating to the decision, in English or French) Within fifteen days of the deadline for filing the statement of appeal, the appellant shall file his appeal brief with CAS and, within thirty days of receipt of the appeal brief, the respondent shall file his answer with CAS.*

Respondents to the CAS Appeal

18. *As a general rule, the respondent to a CAS appeal shall be the party which has taken the decision that is subject to appeal. Where the Member has delegated the conduct of a hearing under these Rules to another body, committee or tribunal ..., the respondent to the CAS appeal against such decision shall be the Member.*

19. *Where the IAAF is appellant before CAS, it shall be entitled to join as additional respondent(s) to the appeal such other parties as it deems to be appropriate, including the Athlete, Athlete Support Personnel or other Person or entity that may be affected by the decision.*

The CAS Appeal

22. *All appeals before CAS shall take the form of a re-hearing and the CAS Panel shall be able to substitute its decision for the decision of the relevant tribunal of the Member or the IAAF where it considers the decision of the relevant tribunal of the Member or the IAAF to be erroneous or procedurally unsound. The CAS Panel may in any case add to or increase the Consequences that were imposed in the contested decision.*

23. *In all CAS appeals involving the IAAF, CAS and the CAS Panel shall be bound by the IAAF Constitution, Rules and Regulations (including the Anti-Doping Regulations). In the case of any conflict between the CAS rules currently in force and the IAAF Constitution, Rules and Regulations, the IAAF Constitution, Rules and Regulations shall take precedence.*

24. *In all CAS appeals involving the IAAF, the governing law shall be Monegasque law and the arbitrations shall be conducted in English, unless the parties agree otherwise.*

25. *The CAS Panel may in appropriate cases award a party its costs, or a contribution to its costs, incurred in the CAS appeal.*

26. *The decision of CAS shall be final and binding on all parties, and on all Members, and no right of appeal will lie from the CAS decision. The CAS decision shall have immediate effect and all Members shall take all necessary action to ensure that it is effective”.*

3.2 Appeal Proceedings

77. As these proceedings involve an appeal against a decision rendered by RUSADA, brought on the basis of provisions contained in the statutes of an international federation, they are considered and treated as appeal arbitration proceedings in a disciplinary case heard by a national anti-doping organization, within the meaning and for purposes of the Code.

3.3 Admissibility

78. The statement of appeal was filed within the deadline set in Article 42.15 of the 2015 IAAF ADR, counted from the day of receipt by IAAF of the Decision. Accordingly, the appeal is admissible.

3.4 Scope of the Panel’s Review

79. According to Article R57 of the Code,

“the Panel shall have full power to review the facts and the law. It may issue a new decision which replaces the decision challenged or annul the decision and refer the case back to the previous instance. ...”.

80. Article 42.15 of the 2015 IAAF ADR confirms in that regard that:

“All appeals before CAS shall take the form of a re-hearing and the CAS Panel shall be able to substitute its decision for the decision of the relevant tribunal of the Member or the IAAF where it considers the decision of the relevant tribunal of the Member or the IAAF to be erroneous or procedurally unsound. The CAS Panel may in any case add to or increase the Consequences that were imposed in the contested decision”.

3.5 Applicable Law

81. The law applicable in the present arbitration is identified by the Panel in accordance with Article R58 of the Code.

82. Pursuant to Article R58 of the Code, the Panel is required to 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, the application of

which the Panel deems appropriate. In the latter case, the Panel shall give reasons for its decision”.

83. Pursuant to Article 42.23 of the 2015 IAAF ADR (and to Article 42.22 of the 2009 IAAF ADR):

“In all CAS appeals involving the IAAF, CAS and the CAS Panel shall be bound by the IAAF Constitution, Rules and Regulations (including the Anti-Doping Regulations). In the case of any conflict between the CAS rules currently in force and the IAAF Constitution, Rules and Regulations, the IAAF Constitution, Rules and Regulations shall take precedence”.

84. In accordance, then, with Article 42.23 of the 2015 IAAF ADR (and to Article 42.22 of the 2009 IAAF ADR):

“In all CAS appeals involving the IAAF, the governing law shall be Monegasque law”.

85. As a result, pursuant to Article R58 of the Code, this Panel will apply primarily the IAAF rules and regulations, and subsidiarily Monegasque law.

86. The IAAF provisions set by the IAAF ADR which are relevant in this arbitration include the following:

- i. from the 2009 IAAF ADR:

Article 40.9 – *“Disqualification of Results in Competitions Subsequent to Sample Collection or Commission of an Anti-Doping Rule Violation”*

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

- ii. from the 2015 IAAF ADR:

Article 40.9 – *“Disqualification of Individual Results in Competitions Subsequent to Sample Collection or Commission of an Anti-Doping Rule Violation”*

“In addition to the automatic Disqualification of the Athlete’s individual results in the Competition which produced the positive sample under Rules 39 and 40, all other competitive results obtained by the Athlete from the date the positive Sample was Collected (whether In-Competition or Out-of-Competition) or other anti-doping rule violation occurred, through to the commencement of any Provisional Suspension or Ineligibility period shall, unless fairness requires otherwise, 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”.

3.6 The Dispute

87. The object of the dispute, as already underlined, is the portion of the Decision (point 3) which, “pursuant to the Art. 40.9” of the 2015 IAAF ADR “and taking into account fairness and proportionality”, disqualified the competitive results of the Athlete in two different periods (20 June 2011 – 20 August 2011 and 3 July 2012 – 3 September 2012), corresponding to periods starting one month before and ending one month after the date of collection of those samples entered into the Athlete’s ABP that the Anti-Doping Committee conclusively found to be abnormal, *i.e.* sample 6 of 20 July 2011 and sample 11 of 3 August 2012. IAAF challenges this “selective” disqualification of results, submitting, in its primary claim, that all results achieved by the Athlete from the date of her first abnormal sample (20 July 2011) to the date she accepted a provisional suspension (25 July 2013) must be disqualified, including those obtained on 27 August 2011 at the 2011 World Championships (where the Athlete won the gold medal and became the World champion), on 16 September 2011 at the 2011 Diamond League Meeting, on 17 August 2012 at the 2012 Diamond League Meeting and on 10 July 2013 at the 2013 Universiade (where the Athlete won the gold medal).
88. The other portions of the Decision, whereby the Athlete was found guilty of an anti-doping rule violation on the basis of the 2009 IAAF ADR (point 1) and was declared ineligible for a period of 3 years and 2 months (point 2), remain unchallenged, and are therefore final.
89. As a result, the main issue that this Panel has to decide is whether the Decision was correct in disqualifying only some of the results achieved by the Athlete in the period following the date on which the anti-doping rule violation was found to have been committed and the beginning of the period of (provisional) suspension/ineligibility. In this connection, the parties brought some other incidental issues to the attention of the Panel during the course of the arbitration: *inter alia*, the identification of the rules which have to be applied, and, if relevant, the meaning and conditions of application of the “fairness exception” mentioned at Article 40.9 of the 2015 IAAF ADR.
90. As said, the Panel was requested to identify, first, the rules which apply for a decision on the disqualification of the Athlete’s results. The IAAF ADR have evolved over the years: at the time the anti-doping rule violation was committed (*i.e.*, in the period covered by the Athlete’s ABP: August 2009 – August 2012), the 2009 IAAF ADR were in force¹¹, when the Decision was adopted (on 30 January 2015), the 2015 IAAF ADR had become applicable.
91. Taking into account such evolution, and as already underlined, the Anti-Doping Committee decided to apply (i) the 2009 IAAF ADR, defined to be the “Old Rules”, to the issue of liability (finding of an anti-doping rule violation) and to the determination of one of the consequences of the established liability (ineligibility period), and (ii) the 2015 IAAF ADR, defined to be the “New Rules”, to another consequence of the same finding (disqualification of results). Such peculiar conclusion was reached by invoking the “*tempus regit actum*” principle to justify the

¹¹ See the preceding footnote 10: the reference to the 2009 IAAF ADR is intended to cover also those editions of the IAAF ADR which followed them and preceded the 2015 IAAF ADR.

application of the 2009 IAAF ADR, and the “*lex mitior*” principle to explain the application of the 2015 IAAF ADR. Article 40.9 of the latter, while providing for the disqualification of results (in the same way as Article 40.9 of the 2009 IAAF ADR), allows, unlike the former, the non-disqualification for reasons of “fairness”. The most recent version of the IAAF ADR was thus considered to be more favourable to the Athlete, and was consequently applied as “*lex mitior*”. The Anti-Doping Committee therefore found *ex officio* the existence of reasons of “fairness” to disqualify only some of the Athlete’s results; with the consequence that the results achieved by the Athlete at the 2011 World Championships, at the 2011 Diamond League Meeting, at the 2012 Diamond League Meeting and at the 2013 Universiade were left untouched.

92. The Appellant disputes this approach. Even though it had accepted in its appeal brief that the issue of the disqualification of the Athlete’s results should be governed by the 2015 IAAF ADR, the Appellant subsequently (§ 43 above) took issue on this point, clarifying that precedents of the European Court of Human Rights and of the Swiss Federal Tribunal indicate that the “*lex mitior*” principle was improperly applied. The Appellant argued that the hearing body cannot undertake a rule-by-rule comparison of the two systems (the 2009 IAAF ADR and the 2015 IAAF ADR), picking the most favourable rule of each system, because it would thereby create a new *ad hoc* disciplinary regime composed of a miscellany of rules deriving from different systems. The Appellant added that the Anti-Doping Committee should have, and the CAS now must, apply whichever of the 2009 or the 2015 system is most favourable for the accused, without picking individual provisions from each. The Decision is wrong because it mixed provisions from both the 2009 and 2015 system. Rather, the Anti-Doping Committee should have applied the rules in force at the time of the anti-doping rule violation (*i.e.*, the 2009 IAAF ADR), which were more favourable to the Athlete, since they provided a standard sanction for her infringement of 2 years of ineligibility, even though they did not contain the “fairness exception”.
93. The Second Respondent raised an objection, based on Article R56 of the Code, to the admissibility of this new line of reasoning. At the same time, all Respondents, however, insisted that the “fairness exception” should apply also in the context of the 2009 IAAF ADR, because it is a general principle enshrined also in that edition of the IAAF ADR, and expressed in the WADC.
94. The Panel notes that it is undisputed that the 2009 IAAF ADR govern the issue of the commission by the Athlete of an anti-doping rule violation and were applied to the determination of the corresponding ineligibility period. This point was finally settled by the Decision, which was not challenged in this respect. It is therefore accepted that the 2009 IAAF ADR (and not the 2015 IAAF ADR) provide the overall legal framework to judge on the Athlete’s anti-doping rule violation and its consequences.
95. On such basis, the application of the 2009 IAAF ADR would in principle also imply the applicability of Article 40.9 of the 2009 IAAF ADR, which does not provide for a “fairness exception”. However, the question before the Panel is whether the “fairness exception” (within the meaning to be further specified) is also to be read into the 2009 IAAF ADR, as a general principle, or by reference to Article 40.9 of the 2015 IAAF ADR, pursuant to the “*lex mitior*”

principle.

96. The Panel sees the force of the IAAF argument that specific rules cannot be picked from different systems. The *lex mitior* principle prevents the continued applicability of a disciplinary rule after it has been replaced by a more lenient one, and reflects, in favour of the accused, the evolution of a legislative policy, which translates into rules the opinion that the same infringement is less severe than it was previously perceived. However, this principle cannot be applied in a way that creates a law that never existed, composed of a mixture of old and new rules and upsetting the rationale of both systems.
97. At the same time the Panel, even though it remains unpersuaded, cannot exclude as *prima facie* misplaced the Respondents' arguments regarding the possibility of applying a general principle of "fairness" in deciding whether some results are to be left untouched, even in the absence of an explicit rule to this effect in the 2009 IAAF ADR. In the same way, the Panel notes the Second Respondent's exception, under Article R56 of the Code, as to the admissibility of the introduction in the arbitration by the Appellant of a new line of reasoning (disputing the applicability of the "*lex mitior*" principle) after the filing of the appeal brief and the Respondents' answers, even though the Panel remarks that issues of law (such as those regarding the proper identification of the applicable rules) are subject to the "*iura novit curia*" principle (and therefore can be raised at any time by the Panel by its own motion, subject only to the parties' right to be heard).
98. However, the Panel does not find it necessary to draw a final conclusion on the issues of the admissibility of the Appellant's late challenge to the application of the "*lex mitior*" principle and of whether the 2009 IAAF ADR should be read as including a "fairness exception". As indicated below, even assuming it does, the Panel would reach the same conclusion that it should not apply here, because the Panel cannot see any factors justifying a deviation from the rule of automatic disqualification set by Article 40.9 of the 2009 IAAF ADR and of the 2015 IAAF ADR.
99. In both versions, the finding of an anti-doping rule violation triggers the disqualification (i) of the results achieved in the competition which produced a positive sample, and (ii) of all other competitive results obtained in the period between (a) the date of the positive sample's collection, or of the other anti-doping rule violation, and (b) the date of commencement of the ineligibility (or provisional suspension). The version of Article 40.9 of the 2015 IAAF ADR makes clear that, while the disqualification of the results achieved at the competition which produced the positive sample is automatic and unavoidable, the disqualification of the competitive results obtained in the subsequent period applies "*unless fairness requires otherwise*", i.e. unless it is fair not to disqualify them. In other words, "fairness" should be found in order not to disqualify the results. It is therefore an exception to the general disqualification rule. In light of the provision's clear wording, the Panel therefore disagrees with the Respondents' submissions that "fairness" is a precondition to the disqualification of a result.
100. The findings (undisputed in this arbitration, and indeed never contested also before the Anti-Doping Committee) that the Second Respondent is responsible for an anti-doping rule violation

(identified through the examination of her ABP) and that her anti-doping rule violation can be set (as mentioned in the Decision) at the date of the collection of sample 6 in her ABP (and therefore on 20 July 2011) thus mean that her competitive results obtained in the period between 20 July 2011 and 25 July 2013 (date on which she accepted the provisional suspension) must be disqualified, unless fairness requires otherwise.

101. The Panel finds that no reasons of fairness exist in this case that could justify mitigating the effects of Article 40.9 of the 2009 IAAF ADR. This conclusion applies irrespective of the discussion between the parties as to whether the anti-doping organization or the athlete bears the burden of proving whether it is fair to disqualify the results in question.
102. As a preliminary matter, the Panel notes that “fairness” is a broad concept (CAS 2013/A/3274, para. 85), covering a number of elements that the deciding body can take into account in its decision not to disqualify some results. The CAS precedents (in general terms, *inter alia*, CAS 2007/A/1283, para. 53; CAS 2013/A/3274, para. 85-88) took into account a number of factors, such as the nature and severity of the infringement (CAS 2010/A/2083, para. 81), the length of time between the anti-doping rule violation, the result to be disqualified and the disciplinary decision, the presence of negative tests between the anti-doping rule violation and the competition at which the result to be disqualified was achieved, and the effect of the infringement on the result at stake (CAS 2008/A/1744, para. 76; CAS 2007/A/1362 & 1393, para 7.22). The Panel underlines that no single element is decisive alone: an overall evaluation of them is necessary.
103. In that regard, and bearing in mind the submissions of the parties:
 - i. as to the characteristics of the anti-doping rule violation, the Panel notes that the Athlete engaged in continuous, intentional and severe violations of the anti-doping regulations. The point, indeed, is confirmed by the findings in the Decision, leading to the setting of an ineligibility period, in a measure which is longer than the minimum provided by the 2009 IAAF ADR, based on aggravating circumstances. In the same vein, the Panel is comforted by the opinion of the IAAF experts filed in the course of this arbitration¹², only marginally and “hypothetically” challenged by the Respondents’ experts. As it has been underlined, the blood values entered into the Athlete’s ABP and/or discussed by the parties’ experts in the course of the arbitration show abnormalities indicating that the Athlete was engaged in blood doping cycles at least over three years, from 2011 to 2012. The Panel, more specifically, based on the expert opinions reviewed, remarks that the Athlete’s ABP includes two doping cycles in 2011 (around sample 6) and in 2012 (around sample 11), showing stimulation followed by suppression phases¹³ in the lead up to

¹² The Panel remarks indeed the experience and expertise of the Appellants’ experts, and, as the most important element, the weight of published literature which supported their opinions.

¹³ The Panel in that regard understands, in fact, that (as explained by the experts heard at the hearing and underlined also in the case CAS 2010/A/2235, para. 100) blood withdrawal produces lower than normal hemoglobin (HGB, measured by its weight in a given quantity of blood) and higher than normal percentage of reticulocytes in blood (RET%), since the bone marrow responds to blood loss by releasing a higher number of “young” blood cells. The reverse happens post EPO-stimulation, which produces heritropoietic suppression, *i.e.* an inhibition in the

important competitions. In the same way, the Panel notes that also Mr Scott, when heard at the hearing, agreed with the IAAF's experts that the Athlete's blood values of 2013 attached to his report are abnormal. 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 she was using, but still gain the advantage of her unlawful practice¹⁴;

- ii. as to the effects of the infringements on the results at stake, the Panel is convinced by the Appellant's submissions, based on the expert reports, that blood doping, in the way it was conducted by the Athlete, was intended to have, and actually had, long-lasting effects, as *inter alia* it improved the Athlete's capacity to train, for, otherwise, the Athlete's use of a prohibited method or of a prohibited substance chiefly in pre-competition periods would be substantially devoid of purpose. Therefore, the raising of doubts by the Respondents as to the abnormality of the analytical results of some of the samples in the Athlete's ABP does not mean that at the time those samples were collected the Athlete was not "benefiting" from the effects of blood doping evidenced by abnormal samples. It cannot therefore be maintained that some of the competitions in the period following (or comprised within) the various cycles of blood manipulation were not affected by the Athlete's doping practices;
- iii. as to the principle applied in the case CAS 2010/A/2235, the Panel remarks that the CAS Panel, unlike the Anti-Doping Committee, disqualified all results in the period between the first and the last abnormal sample and considered, in applying the fairness exception, that it was unlikely that the results outside this period had been affected by the athlete's anti-doping violation. In the Athlete's case, the Panel considers that the Athlete's repeated violations of the anti-doping regulations over a long period of time make it impossible to exclude, in "fairness", some results, and chiefly the results obtained at the 2011 World Championships, at the 2011 Diamond League Meeting, at the 2012 Diamond League Meeting and at the 2013 Universiade, from disqualification. Indeed, the "doping cycles" to which the Athlete underwent clearly appear intended to enhance the sporting performance of the Athlete at the major competitions scheduled immediately after each mentioned "cycle";
- iv. as to the length of time between the anti-doping rule violation, the result to be disqualified and the starting date of the ineligibility period, the Panel underlines that such factor does not justify application of the "fairness exception". Indeed, the most recent "doping cycle" evidenced by the ABP took place in the first part of 2012, only months before the major competitions of that year and the day on which the Athlete's provisional suspension commenced;
- v. as to the absence of positive tests and the method applied to evaluate the samples

physiological process which produces red blood cells.

¹⁴ Note that in CAS 2013/A/3274 a negative test and the light degree of fault were decisive elements for the Sole Arbitrator not to disqualify the results: para. 89 of the award of 31 January 2014.

provided by the Athlete to find an anti-doping rule violation, the Panel notes that the ABP profile has been validated in a long line of CAS cases (see *inter alia*: CAS 2010/A/2174; TAS 2010/A/2178; CAS 2010/A/2308 & 2335; CAS 2012/A/2773; as well as CAS 2010/A/2235) as a reliable means to detect blood doping, even in the absence of positive tests, through the identification of abnormal values calling for an explanation by the athlete in question. In addition, the Decision, unchallenged on this point, found the commission of repeated anti-doping rule violations based on the ABP evidence and the Athlete's failure to provide explanations regarding the abnormal values. The Panel is therefore more than comfortably satisfied that the finding of an anti-doping rule violation based on the review of the Athlete's ABP does not constitute a ground not to disqualify (for reasons of "fairness") the results she obtained following her anti-doping rule violations;

- vi. as to the principle of proportionality, the Panel finds that, contrary to the Respondents' contention, it requires the retroactive disqualification of results, rather than the opposite. The principle of proportionality implies that there must be a reasonable balance between the kind of misconduct and the sanction, and in particular that (i) the measure taken by the governing body can achieve the envisaged goal, (ii) the measure taken by the governing body is necessary to reach the envisaged goal, and (iii) the constraints on the affected person resulting from the measure are justified by the overall interest of achieving the envisaged goal. In other words, to be proportionate, a measure must not exceed what is reasonably required in the search for a legitimate objective (CAS 2005/C/976 & 986, §§ 139-140, citing CAS precedents, legal doctrine and Swiss jurisprudence). In this respect, the Panel notes that:
- the purpose of disqualification in the Athlete's case is *inter alia* to prevent her from gaining the advantage sought by her intentional, continued and severe doping violations over other competitors, who competed without doping;
 - the measure of disqualification is certainly capable of achieving the envisaged goal, since it implies the cancellation of the results obtained;
 - the measure of disqualification is necessary to reach the envisaged goal, because the Athlete, who cheated in the preparation of a given competition, would otherwise keep the benefits of the results achieved to the detriment of clean competitors, and
 - the constraints on the Athlete are justified by the overall interest of achieving the envisaged goal.
- vii. as to the Athlete's expectations, the Panel remarks that an athlete who indulged in recurrent blood manipulation over several years cannot legitimately expect that results obtained as a result of doping practices be maintained;
- viii. as to this Panel's power of review, this CAS Panel notes and accepts the *dictum* in the award of 21 May 2010, CAS 2009/A/1870, at para. 125, under which "*the measure of the sanction imposed by a disciplinary body in the exercise of the discretion allowed by the relevant rules can be reviewed only when the sanction is evidently and grossly disproportionate to the offence (see TAS 2004/A/547, §§ 66, 124; CAS 2004/A/690, § 86; CAS 2005/A/830, § 10.26; CAS 2005/C/976 & 986, § 143; 2006/A/1175, § 90; CAS 2007/A/1217, § 12.4)*". However,

such jurisprudence, confirmed in several other CAS awards, far from excluding or limiting the power of a CAS Panel to review the facts and the law involved in the dispute heard (pursuant to Article R57 of the Code), only means that a CAS Panel “*would not easily ‘tinker’ with a well-reasoned sanction, i.e. to substitute a sanction of 17 or 19 months’ suspension for one of 18*” (award of 10 November 2011, CAS 2011/A/2518, § 10.7, with reference to CAS 2010/A/2283, § 14.36). As a result, in this case it provides no limit to this Panel’s power to review and set aside the Decision, as it wrongly applied the “fairness” exception provided by the IAAF ADR.

104. In light of the foregoing and of an overall evaluation of all relevant elements, the Panel concludes that all competitive results obtained by the Athlete from the date of first commission of the anti-doping rule violation (20 July 2011) through to the commencement of her provisional suspension (25 July 2013) must be disqualified, with all resulting consequences in accordance with Article 40.9 of the 2009 IAAF Rules. No reasons of fairness can be found not to disqualify them.

3.7 Conclusion

105. In light of the foregoing, the Panel unanimously holds that the appeal brought by IAAF is to be allowed and all competitive results obtained by the Athlete from 20 July 2011 to 25 July 2013 are disqualified, with all resulting consequences in accordance with Article 40.9 of the 2009 IAAF Rules. Point 3 of the Decision is modified accordingly.

ON THESE GROUNDS

The Court of Arbitration for Sport rules that:

1. The appeal filed on 25 March 2015 by the International Association of Athletics Federations (IAAF) against the decision issued on 20 January 2015 by the Disciplinary Anti-Doping Committee of the Russian Anti-Doping Agency is granted.
 2. Point 3 of the decision issued on 20 January 2015 by the Disciplinary Anti-Doping Committee of the Russian Anti-Doping Agency is partially modified.
 3. All competitive results obtained by Ms Yuliya Zaripova from 20 July 2011 to 25 July 2013 are disqualified, with all resulting consequences in accordance with Article 40.9 of the 2015 IAAF Rules.
- (...)
7. All other motions or prayers for relief are dismissed.