Arbitration CAS 2011/A/2384 Union Cycliste Internationale (UCI) v. Alberto Contador Velasco & Real Federación Española de Ciclismo (RFEC) & CAS 2011/A/2386 World Anti-Doping Agency (WADA) v. Alberto Contador Velasco & RFEC, award of 6 February 2012

Panel: Mr Efraim Barak (Israel), President; Mr Quentin Byrne Sutton (Switzerland); Prof. Ulrich Haas (Germany)

Cycling
Doping (clenbuterol)
Food supplement contamination
Admissibility of the testimony of a protected witness
Admissibility of the polygraph examination
New evidence
Adverse analytical finding
Burden of proof (principle)
Balance of probability standard
Proof of negative fact
Meat contamination
Disciplinary sanction
Starting point of the period of ineligibility

1. **The admission of anonymous witnesses potentially infringes upon both the right to be heard and the right to a fair trial of a party guaranteed by the European Convention of Human Rights and the Swiss Constitution since personal data, record of a witness and the right to ask questions are important elements of information to have in hand when testing the witness' credibility. However, with respect to anonymous witness statements the Swiss Federal Tribunal stressed that their admission does not necessarily violate the right to a fair trial. According to the Swiss Federal Tribunal, if the applicable procedural code provides for the possibility to prove facts by witness statements, it would infringe the principle of the court's power to assess the witness statements if a party was prevented from the outset from relying on anonymous witness statements. According to the Swiss Federal Court the right of a party to use anonymous witness statements must be nevertheless subject to strict conditions namely the witness must be concretely facing a risk of retaliations by the party he is testifying against if his identity was known, the witness must be questioned by the court itself which must check his identity and the reliability of his statements; and the witness must be cross-examined through an "audiovisual protection system".**

2. **Based on the Panel's powers to administrate proof under Art. 184 PILA, given the Appellants acceptance that the polygraph examination is admissible as evidence *per se* and taking into consideration the entry into force of the WADC, the results of the polygraph examination undergone by the athlete are admissible in the particular case,**

the credibility of which must nonetheless be verified in light of all the other elements of proof adduced.

3. **Under Article R51 of the CAS Code, an expert testimony on a specific issue requested by the Appellant has to be mentioned in the expert opinion included in the Appellant's written submissions. Addressing questions to an expert on a specific issue not included in the expert opinion at the stage of the hearing is not allowed in principle under Article R56 of the CAS Code.**

4. **Considering that clenbuterol is a non threshold prohibited substance, the fact that the concentration is extremely low does not have any effect on the result. It is therefore undisputed given the analytical reports made by the Laboratory and the confirmation of the adverse analytical finding by the B Sample that the athlete has committed an anti-doping rule violation and that the Appellants have met the standard of proof.**

5. **Pursuant to the UCI ADR and according to the established CAS jurisprudence, once an adverse analytical finding has been established the burden of proof shifts to the athlete who has to establish on the balance of probabilities in order to escape a sanction or to obtain a reduction of the sanction, how the prohibited substance entered his/her system and that he/she in an individual case bears no fault or negligence, or no significant fault or negligence.**

6. **For the Panel to be satisfied that a means of ingestion is demonstrated on a balance of probability simply means, in percentage terms, that it is satisfied that there is a 51% chance of it having occurred. The athlete thus needs to show that one specific way of ingestion is marginally more likely than not to have occurred.**

7. **Under Art. 8 of the Swiss Civil Code (CC), unless the law provides otherwise, each party must prove the facts upon which it is relying to invoke a right, thereby implying that the case must be decided against the party that fails to adduce such evidence. A valid contestation of facts needs to be specific, i.e. it must be directed and attributable to an individual fact submitted by the party bearing the burden of proof. According to the doctrine, the threshold for meeting such an obligation to specify the contestation is – under normal circumstances – rather low, since it must be avoided that the prerequisites for contesting an allegation result in a reversal of the burden of proof. Nevertheless, there are exceptions to this low threshold. The exceptions concern cases in which a party is faced with a serious difficulty in discharging its burden of proof ("état de nécessité en matière de preuve", "Beweisnotstand". This is the case whenever a party needs to prove "negative facts". In this respect, the Swiss Federal Tribunal makes it clear that difficulties in proving "negative facts" result in a duty of cooperation of the contesting party who must cooperate in the investigation and clarification of the facts of the case. However, the above difficulties do not lead to a re-allocation of the risk if a specific fact cannot be established. Instead, this risk will always remain with the party having the burden of proof.**

8. **The athlete can only succeed in discharging his burden of proof by proving that (1) in his particular case meat contamination was possible and that (2) other sources from which the Prohibited Substance may have entered his body either do not exist or are less likely. The latter involve a form of negative fact that is difficult to prove for the athlete and which requires the cooperation of the Appellants. Thus, it is only if the theory put forward by the Athlete is deemed the most likely to have occurred among several scenarios, or if it is the only possible scenario, that the Athlete shall be considered to have established on a balance of probability how the substance entered his system, since in such situations the scenario he is invoking will have met the necessary 51% chance of it having occurred. Unlike certain other countries, notably outside Europe, Spain is not known to have a contamination problem with clenbuterol in meat. Furthermore, no other cases of athletes having tested positive to clenbuterol allegedly in connection with the consumption of Spanish meat are known. As a result, no established facts that would elevate the possibility of meat contamination to an event that could have occurred on a balance of probabilities has been established.**

9. **Pursuant to the UCI ADR, the period of ineligibility shall be two years for a first anti-doping rule violation. If none of the conditions for eliminating or reducing the period of ineligibility are applicable – in particular because the exact contaminated supplement is unknown and the circumstances surrounding its ingestion are equally unknown – the period of ineligibility shall not be reduced. Moreover, the athlete is automatically disqualified from the competition in the course of which he was tested. In addition, the results obtained in all competitions the athlete participated as from the date when the ineligibility period is deemed to have begun are also disqualified.**

10. **According to the UCI ADR where there have been substantial delays in the hearing process or other aspects of Doping Control not attributable to the License-Holder, the Panel is entitled to fix the start of the period of ineligibility at an earlier date commencing as early as the sample collection. In addition the provisional suspension imposed and respected by the licence-holder must be deducted from the period of ineligibility.**

The Union Cycliste Internationale (UCI) is a non-governmental association of national cycling federations recognized as the international federation governing the sport of cycling in all its forms, with its registered office in Aigle, Switzerland.

The World Anti-Doping Agency (WADA) is the independent international anti-doping agency, constituted as a private law foundation under Swiss Law with its seat in Lausanne, Switzerland, and having its headquarters in Montreal, Canada, which aim is to promote, coordinate and monitor, on an international level, the fight against doping in sports in all its forms.

Mr Alberto Contador Velasco ("Mr Contador" or the "Athlete") is a professional cyclist of the elite category and has the Spanish nationality. He is an Elite Pro license holder (n°2247396) and is currently a rider of the Saxo Bank Sungard ProTeam.

The Real Federación Española de Ciclismo (RFEC) is the governing body of cycling in Spain with its headquarters in Madrid, Spain. The RFEC is a member of the UCI.

Mr Contador, then a member of the ProTeam Astana, participated in the 2010 Tour de France, a stage race on the UCI's international calendar that took place from 3 July to 25 July 2010. Mr Contador won the 2010 Tour de France.

On 21 July 2010, a rest day following the 16th stage of the 2010 Tour de France, the UCI submitted Mr Contador to a urine doping test pursuant to the UCI Anti-Doping Regulations (the "UCI ADR") between 20:20 and 20:30 in the city of Pau, France.

Mr Contador confirmed on the doping control form that this sample (Sample number 2512045) (the "Sample") had been collected in accordance with the regulations.

The Athlete's A Sample was analysed on 26 July 2010 at the WADA-accredited Laboratory for Doping Analysis – German Sports University Cologne in Cologne, Germany (the "Cologne Laboratory").

It resulted from the certificate of analysis of 19 August 2010 that Mr Contador's A Sample (A-2512045) contained clenbuterol in a concentration of 50 pg/mL. Clenbuterol is a Prohibited Substance classified under Article S1.2 (other Anabolic Agents) of the 2010 WADA Prohibited Substances List.

On 24 August 2010, UCI informed Mr Contador by telephone of the adverse analytical finding. Mr Contador was also informed that he was provisionally suspended from the date of receipt of the official notification in accordance with Article 235 UCI ADR. Furthermore, a meeting was arranged between UCI and Mr Contador on 26 August 2010.

The meeting of 26 August 2010 was arranged in order to deliver Mr Contador the official notification of the adverse analytical finding, the full documentation package of the A Sample analysis (Documentation Package A-2512045), the notification of the provisional suspension and also to explain the management process of the case. On this occasion, Mr Contador requested the opening and analysis of the B Sample (B-2512045) and acknowledged the decision that he was provisionally suspended. During this meeting, the Athlete explained that the origin of the Prohibited Substance must have been contaminated meat.

On 8 September 2010, in the presence of Mr Contador's representatives, Dr de Boer and Mr Ramos, the B Sample analysis took place. The result of the Analysis of the B Sample confirmed the A Sample result.

As a consequence of the low concentration of clenbuterol found in Mr Contador's A and B Samples and the fact that the samples that had been collected prior to 21 July 2010 did not contain clenbuterol, the UCI, as well as WADA, decided to conduct a series of investigations in an attempt to understand the finding obtained and, in particular, whether the finding might indicate that other anti-doping violations could have been committed than just the presence of clenbuterol.

Following the investigation conducted together with WADA (WADA issued a report on 5 November 2010), the UCI concluded that the file contained a sufficient basis to proceed with the case as an apparent anti-doping rule violation. Therefore, by letter of 8 November 2010, and pursuant to Article 234 UCI ADR, the UCI asked the RFEC to initiate disciplinary proceedings against Mr Contador.

On 10 November 2010, the acceptance of the documentation submitted by UCI led to the fact that the *Comité Nacional de Competición y Disciplina Deportiva* (the "CNCDD") of the RFEC, which sanctioning responsibilities for the processing of this case are delegated by said international organisation, agreed to the initiation of the Disciplinary Proceeding with number 17/2010 against Mr Contador, for the alleged breach pursuant to Article 21(1) and (2) UCI ADR.

On 26 November 2010, Mr Contador was heard by the CNCDD of the RFEC.

The silence of the UCI and WADA in relation to the request for documentary and scientific collaboration made by the CNCDD led the examining judge, and later on the CNCDD to conduct the preliminary investigation of the case and, respectively, to issue its decision solely on the notification of the adverse results and the evidence presented by the Athlete.

On 25 January 2011, the examining judge of the CNCDD made a proposition to Mr Contador aiming at imposing to him a one year licence suspension

On 7 February 2011, Mr Contador refused the proposal made by the examining judge of the CNCDD.

On 14 February 2011, the CNCDD rendered a decision according to which Mr Contador was acquitted (the "Decision").

On 24 March 2011, the UCI filed an appeal at the Court of Arbitration for Sport (CAS) against Mr Contador and the RFEC with respect to the Decision pursuant to the Code of Sports-related Arbitration 2010 edition (the "Code").

In its statement of appeal, the UCI nominated Dr Quentin Byrne-Sutton, attorney-at-law in Geneva, Switzerland, as arbitrator.

On 29 March 2011, WADA filed an appeal at the CAS against Mr Contador and the RFEC with respect to the Decision pursuant to the Code. In its statement of appeal, WADA nominated Dr Quentin Byrne-Sutton as arbitrator.

On 31 March 2011, the CAS Court Office suspended the time limit for the UCI to file its appeal brief pending an agreement of the parties or a decision from the President of the CAS Appeals Arbitration Division, or his Deputy, on the issues of the consolidation and of the procedural calendar.

On 4 April 2011, following the parties' agreement, the CAS Court Office informed that both appeals shall be consolidated and be heard by the same Panel. Furthermore, the CAS Court Office informed the parties that all their letters on the procedural calendar were forwarded to the President of the CAS Appeals Arbitration Division, or his Deputy, in order for a decision to be taken in this respect.

On 5 April 2011, the CAS Court Office informed the parties that the Deputy President of the CAS Appeals Arbitration Division had decided to fix the deadline for the Appellants appeal briefs on 18 April 2011. Moreover, the Deputy President of the CAS Appeals Arbitration Division had decided that since the parties did not agree on a full procedural calendar, it will be for the Panel, once constituted, to decide on the Respondents' requested extension of the time limit to file the answers.

On 11 April 2011, the RFEC requested that Dr Byrne-Sutton, arbitrator nominated by the Appellants, disclose the number of cases in which he was nominated by an anti-doping organization or any other party acting against a person accused of having committed an anti-doping violation since the enactment of the World Anti-Doping Code (WADC), and the number of cases in which he was appointed as a CAS arbitrator by a party represented by the Counsel for WADA or the latter's law firm.

On 11 April 2011, the RFEC confirmed that the Respondents jointly nominated Prof. Ulrich Haas as arbitrator.

On 18 April 2011, both the UCI and WADA filed their respective appeal briefs.

On 20 April 2011, pursuant to Article R54 of the Code, and on behalf of the Deputy President of the CAS Appeals Arbitration Division, the CAS Court Office informed the parties that the Panel appointed to decide the present matter was constituted by: Mr Efraim Barak, attorney-at-law in Tel-Aviv, Israel, as President; Dr Quentin Byrne-Sutton, attorney-at-law in Geneva, Switzerland; and Mr Ulrich Haas, Professor in Zurich, Switzerland, as arbitrators.

On 26 April 2011, Mr Contador filed with the CAS a petition for challenge of the nomination of Dr Byrne-Sutton, pursuant to Article R34 of the Code.

On 4 May 2011, the ICAS Board rendered its decision on petition for challenge rejecting Mr Contador's challenge against the nomination of Dr Byrne-Sutton filed on 26 April 2011.

On 4 May 2011, the file has been transferred to the Panel.

On 10 May 2011, the Panel rendered its decision on the Respondents' requests for an extension to submit their answers, granting them until 27 May 2011. Also, the Panel rejected a request for disclosure from the RFEC.

On 26 May 2011, the Panel requested the UCI and the Respondents to provide their position with respect to WADA's request concerning the protected witness and the modalities of his/her examination.

On the same date, the UCI informed the CAS Court Office that it had no objection to WADA's request concerning the protected witness.

On 31 May 2011, both Respondents filed their comments on WADA's request concerning the protected witness, objecting to such request.

On 1 July 2011, Mr Contador requested a new extension of the deadline to file his answer until 8 July 2011 as a significant proportion of the evidence he intended to file could not be finalized by 4 July 2011.

On the same date, the Panel decided to grant the Respondents a last and final extension until 8 July 2011 midday Swiss time to file their answers. The Panel, in consideration of the fact that together with this final extension the Respondents had been granted, in total, a period of more than seventy days to file their answers, informed the Respondents that no further extensions would be granted.

On 1 July 2011, the RFEC filed its answer.

On 8 July 2011 midday, Mr Contador filed his answer. In his answer, Mr Contador made new requests for further information.

On 15 July 2011, after considering all the submissions of the parties with respect to the issue of the protected witness, the Panel decided to deny WADA's request to hear such witness in a protected manner. The parties were informed that the grounds for this decision would be provided in the present award.

On 22 July 2011, WADA requested that a second round of submissions be permitted to address certain specific issues raised by the Respondents in their answers (the transfusion theory and the probability of clenbuterol-contaminated meat in Europe), indicating a new procedural calendar (the Appellants to file complementary briefs on those specific issues by 22 August 2011 and the Respondents to file their answers to such supplementary briefs within 35 days following the receipt of the Appellants' briefs), and that the hearing of 1, 2 and 3 August 2011 be postponed. WADA indicated that all of the other parties confirmed their agreement to such requests.

On 25 July 2011, the Panel decided to deny Mr Contador's requests for further information of 8 July 2011, considering that the documents requested did not exist or that the explanations sought could be addressed at the hearing.

On the same date, the parties were informed that the Panel did not object to the new procedural calendar proposed unanimously by the parties. The Panel noted the conditions surrounding the request for the postponement of the hearing and advised the parties that it did not have any particular objection against any of them. The Panel also noted that the existence of a second exchange of written submissions may allow a significant reduction of the number of witnesses to be heard. The Panel also proposed to the parties to hold the hearing between 1 and 4 November 2011 provided that the second exchange of submissions is concluded by the end of September 2011.

On 22 August 2011, the Panel fixed the hearing dates from 21 November 2011 midday until 24 November 2011 midday and granted to the parties a deadline until 9 September 2011 to file with the CAS their lists of experts and witnesses as well as an indicative hearing schedule.

On 22 August 2011, WADA filed its supplementary brief.

The UCI did not file any additional submission.

On 29 September 2011, Mr Contador requested an extension of 10 days to file his additional submissions, i.e. until 14 October 2011, and indicated that the Appellants did not object to such request. Therefore, the President of the Panel, by letter dated 30 September 2011, confirmed such extension.

On 13 October 2011, Mr Contador requested a further extension until 19 October 2011 to file his additional submissions due to the fact that he was still waiting for two expert reports which were not yet completed.

On 14 October 2011, the President of the Panel decided to exceptionally grant such extension. However, the parties were advised that such extension was the final one and that no further extensions would be granted.

On 19 October 2011, Mr Contador filed his second written submission.

The RFEC did not file any additional submission.

On 4 November 2011, the Panel decided to deny the Respondents' request for private expert conferencing.

On 8 November 2011, Mr Contador requested WADA to present a clarification as to the testimony of Mr Javier Lopez, as no evidence was brought by this witness. Finally, Mr Contador requested CAS to enable the parties' experts to engage in an open discussion in front of the Panel and the parties during their allocated examination time.

On 9 November 2011, WADA presented a general description of the testimony of the above-mentioned witness and argued that the filing of witness statements is not mandatory before CAS, and that there was no need to be more specific. Furthermore, WADA agreed to Mr Contador's

proposal for the parties' experts to engage in an open discussion in front of the Panel, each party and the Panel being permitted to ask questions to the experts during such discussions.

On 11 November 2011, Mr Contador filed a clarification of its objection against the hearing of WADA's witness and expressed its concern that new evidence might be presented by this witness and expressed its objection in that regard.

On the same date, WADA submitted its position on the hearing of its witness and clarified its argument that it had acted in accordance with the Code.

On the same date, the Panel presented an amended tentative hearing schedule taking into consideration the issues raised by Mr Contador in his letter of 8 November 2011. The Panel also decided to authorize the hearing of Mr Javier Lopez under the condition that WADA provide a brief summary of the expected expertise/expert opinion of the witness. Finally, the parties were informed of the Panel's intention to hear the experts in experts' conferences, during which all the experts addressing the same issue would be present.

The RFEC, Mr Contador, WADA and UCI returned duly signed Orders of Procedure on 10, 11, 11 and 14 November 2011 respectively.

On 15 November 2011, WADA presented a brief summary of the expected testimony of Mr Javier Lopez as requested by the Panel on 11 November 2011.

On 16 November 2011, Mr Contador presented a recently published news story to which the Athlete intended to refer during the course of the hearing. This issue was dealt with as a preliminary matter on the first day of the hearing.

In its statement of appeal of 24 March 2011, the UCI indicated that its appeal *"aims at:*

- *having the contested decision annulled and reformed,*
- *having Mr Alberto Contador Velsaco sanctioned in accordance with UCI's anti-doping rules".*

In its appeal brief of 24 March 2011, the UCI made the following requests for relief:

"- *To set aside the contested decision;*
- *To sanction Mr. Contador with a period of ineligibility of two years starting on the date of the Panel's decision;*
- *To state that the period of provisional suspension from 26 August 2010 until 14 February 2011 shall be credited against the period of ineligibility;*
- *To disqualify Mr. Contador from the 2010 Tour de France and to disqualify any subsequent results;*
- *To condemn Mr. Contador to pay to the UCI a fine amounting to 2'485'000.- Euros in addition to 70% of the variable part of his image contract;*
- *To condemn Mr. Contador to pay to the UCI the costs of the results management by the UCI, i.e. 2'500.- CHF;*

- *To condemn Mr. Contador to pay to the UCI the cost of the B-sample analysis, i.e. 500.- Euros;*
- *To order Mr. Contador and RFEC to reimburse to the UCI the Court Office fee of CHF 500.-;*
- *To condemn Mr. Contador and RFEC jointly to pay to the UCI a contribution to the costs incurred by the UCI in connection with these proceedings, including experts' and attorneys' fees".*

In its statement of appeal of 29 March 2011, WADA made the following requests for relief:

"1 The Appeal of WADA is admissible.

2. The Appealed Decision rendered on 14 February 2011 by the RFEC Competition and Sports Discipline National Committee in the matter of Mr. Alberto Contador Velasco is set aside.

3. Mr. Alberto Contador Velasco is sanctioned with a two-year period of ineligibility starting on the date on which the CAS award enters into force. Any period of ineligibility, served by Mr. Alberto Contador Velasco before the entry into force of the CAS award, shall be credited against the total period of ineligibility to be served.

4. Mr. Alberto Contador Velasco is disqualified from the Tour de France 2010 with all of the resulting consequences including forfeiture of any medals, points and prices. In addition, all competitive results obtained by Mr. Alberto Contador Velasco from 21 July 2010 through the commencement of the applicable period of ineligibility shall be disqualified with all of the resulting consequences including forfeiture of any medals, points and prices.

5. WADA is granted an award for costs".

In his answer of 8 July 2011, Mr Contador made the following requests for relief:

"(a) Confirmation of the decision of the RFEC dated 14 February 2011;

(b) Dismissal of the Appeal raised by WADA;

(c) Dismissal of the Appeal raised by the UCI;

(d) Appellants to be ordered to reimburse the Rider's legal costs on the following grounds:

(i) The Rider was cleared of any wrong-doing at first instance. These proceedings are the result of the Appellants' lack of objectivity;

(ii) The Appellants' attempts to use this Appeal as a platform to raise allegations of other unrelated anti-doping rule violations are an abuse of process and have forced the Respondent to spend a disproportionate amount of resource addressing the Appellants' submissions; and

(iii) The Appellants' attempts to dilute the Rider's account that contaminated meat caused his positive test by advancing fantastical alternative theories, has compelled the Rider to spend a disproportionate amount of time and resource rebutting those theories.

The Rider respectfully requests the right to file separate costs submissions on completion of the hearing process.

In the event the Panel decides to impose any period of ineligibility on the Rider, he respectfully requests that:

(a) further to UCI ADR Article 313, fairness requires that his results achieved since 14 February 2011 remain undisturbed; and

(b) further to UCI ADR Article 315, any period of ineligibility imposed be backdated to the date of sample collection, 21 July 2010.

In the event the Panel imposes a two-year ban on the Rider and determines that Article 326(1)(a) of the UCI ADR is valid and can be validly applied in the present case, the Rider respectfully requests that determination of the amount of the fine be argued at a separate proceeding".

In its answer of 1 July 2011, the RFEC made the following requests for relief:

"a) That the appeal filed by the World Anti-Doping Agency against the decision of the CNCDD of the RFEC dated February 14, 2011, is set aside.

b) The appeal filed by the Union Cycliste Internationale against the decision of the CNCDD of the RFEC dated February 14, 2011, is set aside.

c) The resolution file dated February 24, 2011, issued by the CNCDD of the RFEC is confirmed in all respects.

d) The decision rendered by CAS, specifically orders the appellant organizations to pay the costs.

e) In the unlikely hypothesis that CAS considers that the athlete has committed a violation of the ADR, the RFEC is exempted from the costs".

A hearing was held from 21 November 2011 until 24 November 2011 in Lausanne, Switzerland.

At the outset of the hearing, the RFEC reiterated its objection to the appointment of Dr Quentin Byrne-Sutton as arbitrator by the Appellants. However, as this issue was decided already by the ICAS, which is the competent body according to the CAS Code to deal with, and decide on such objections (see article R34 of the Code), the Panel informed the parties that it would not deal with this objection. The other parties did not raise any objection as to the constitution and composition of the Panel.

The Panel heard evidence from the following persons in order of appearance:

- Mr Cesar Martin, representative of Castellana Detectives;
- Mr Francisco-Javier Zabaleta Irazu, sole shareholder and administrator of the Carnicerias y Charcuterías Larrezabal SL Company;
- Mr Javier Lopez, representative of ASPROVAC (Spanish farmers association);
- Dr Javier Martin-Pliego López, statistician;
- Mr Pierre Edouard Sottas, assistant to Dr López;
- Prof. Sheila Bird, Biostatistician programme leader at the Medical Research Council's Biostatistics Unit in Cambridge, England;
- Prof. Wilhelm Schänzer, assistant to Dr Geyer, Deputy Head of the Cologne Laboratory;
- Dr Holger Koch, Certified food chemist and research scientist in the Centre of Toxicology at the Institut für Prävention und Arbeitsmedizin der Deutschen Gesetzlichen Unfallversichering;

- Dr Olivier Rabin, Director of WADA's Sciences Department;
- Dr Jérome Biollaz, Professor Honoraire (Professor emeritus) Division de Pharmacologie et Toxicologie Cliniques;
- Prof. Vivian James, Emeritus Professor of Chemical Pathology at the Imperial College London, Consultant in Medical Biochemistry (by videoconference, with the agreement of the Panel pursuant to article R44.2 of the Code);
- Dr Mike Ashenden, Member of UCI's Blood Passport Expert Panel, member of WADA's ABP Expert Group Committee;
- Mr Paul Scott, President of Scott Analytics, Inc.;
- Dr Lou Rovner, Polygraph Examiner and President of Rovner & Associetes;
- Dr John Palmatier, Polygraph Credibility Consultant (by videoconference, with the agreement of the Panel pursuant to article R44.2 of the Code).

As already stated, by letter of 11 November 2011, the Panel decided, upon the request of the parties, to hear the experts in experts' conferences, where all the experts dealing with the same issue will be present. The Panel provided the parties with indicative directions regarding the experts' conferences. The parties were advised in the same letter as to the procedure of the experts conference, according to which the conference would start by questions addressed by the Respondents to the experts summoned by the Appellants, then the Appellants would address questions to the Respondents' experts, then the Panel would address questions and the experts themselves would be allowed to address questions to each other, under the strict supervision of the Panel to ensure the relevancy and legal legitimacy of the questions. None of the parties raised any objection or made any comment on these directions.

During the hearing, the parties unanimously requested that the issue of the fine to be imposed on Mr Contador, in the event he is sanctioned for an anti-doping rule violation, should be dealt with in writing by way of a new round of submissions. The parties also agreed that the Panel would then render, if relevant, another partial award on this issue only on the basis of the parties' written submissions. The Panel took note of the parties' agreement and confirmed it. Therefore, this award is a partial award in respect of UCI's requests and, except for the matter of costs, is a final award in relation to the requests submitted by WADA. Considering the outcome of the present procedure UCI and the Respondents will be granted (in a separate communication by the CAS) a new deadline to submit their submissions on the issue of the fine.

Each witness and expert heard by the Panel was invited by its President to tell the truth subject to the consequences provided by the law. Each party and the Panel had the opportunity to examine and cross-examine the witnesses/experts. The parties then had ample opportunity to present their cases, submit their arguments and answer to the questions posed by the Panel. After the closing submissions of the parties, Mr Contador was given the opportunity to make a final statement.

Before the hearing was concluded, the parties were asked whether they were satisfied with the procedure and whether their right to be heard had been respected.

The UCI expressed its view that it was not entirely satisfied; it was surprised by the way the experts' conferences were dealt with and did not find it entirely adequate.

WADA raised a number of objections during the hearing, which were detailed in a document that was countersigned also by the UCI and was presented at the closing of the hearing. In this document of 24 November 2011, the Appellants alleged that the Panel decided to conduct the hearing in a manner that significantly restricted the rights of the parties to ask questions to the witnesses and experts. More specifically, according to the Appellants, this resulted in the following breaches of their fundamental rights:

a) The way the hearing was conducted was contrary to the agreement of the parties to have experts' conferences. The very purpose of such conferences is that all the experts have a free discussion to narrow the issue and guide the Panel according to their respective area of expertise. This did regrettably not happen, except for a final limited conference between Mr Paul Scott and Dr Michael Ashenden;

b) WADA was prevented from examining its experts on crucial elements supporting its blood transfusion scenario:

   1) The use of phthalate-free bags;

   2) The possible effect of 'tubing' in relation to the discussion on phthalate-free bags; and

   3) The volume of plasma needed to monitor a blood profile.

c) On 22 November 2011, WADA's lead Counsel agreed that he would delay his questioning of Dr Ashenden on the issue of the phthalate-free bags to the following day. The Appellants understood from the response of the President of the Panel that the request was granted. The decision of the Panel on 23 November 2011 not to allow WADA to put questions on this point to its expert was therefore unexpected and inconsistent with the Panel's indications of the previous day.

Mr Contador's Counsel stated he did not understand the view of the Appellants and disagreed with their objections.

The RFEC agreed with the Athlete's Counsel and expressed its appreciation for the constructive spirit of the members of the Panel. The RFEC considered that all the parties were treated equally and rightfully.

The Panel confirms that it carefully heard and took into account in its discussion and subsequent deliberations all of the submissions, evidence and arguments presented by the parties, even if they have not been specifically summarized or referred to in the present award.

LAW

Jurisdiction of the CAS

1. Article R47 of the Code provides as follows:

   "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 and insofar as the Appellant has exhausted the legal remedies available to him prior to the appeal, in accordance with the statutes or regulations of the said sports-related body.

   An appeal may be filed with the CAS against an award rendered by the CAS acting as a first instance tribunal if such appeal has been expressly provided by the rules applicable to the procedure of first instance".

2. The jurisdiction of CAS in this matter is undisputed and derives from Articles 329.1 and 330 UCI ADR.

3. Article 329.1 UCI ADR provides:

   "The following decisions may be appealed to the Court of Arbitration for Sport:

   1. a decision of the hearing body of the National Federation under article 272; (...)"

4. Article 330 UCI ADR provides, in its relevant parts:

   "In cases under article 329.1 to 329.7, the following parties shall have the right to appeal to the CAS:

   (...)

   c) the UCI;

   (...)

   f) WADA".

Admissibility

5. Article R49 of the Code provides as follows:

   "In the absence of a time limit set in the statutes or regulations of the federation, association or sports-related body concerned, or of a previous agreement, the time limit for appeal shall be twenty-one days from the receipt of the decision appealed against. (...)".

6. Article 334 UCI ADR provides that:

   "[t]he statement of appeal by the UCI, the National Anti-Doping Organization, the International Olympic Committee, the International Paralympic Committee or WADA must be submitted to the CAS within 1 (one) month of receipt of the full case file from the hearing body of the National Federation in cases under article 329.1, 329.2 and 329.5 and from the UCI in cases under article 329.3, 329.4, 329.6 and 329.7.

Failure to respect this time limit shall result in the appeal being disbarred. Should the appellant not request the file within 15 (fifteen) days of receiving the full decision as specified in article 277 or the decision by the UCI, the time limit for appeals shall be 1 (one) month from the reception of that decision.

In any event, WADA may lodge an appeal 21 (twenty-one) days after the last day on which any other party in the case could have appealed".

7. The UCI received the Decision on 15 February 2011 by email and requested the complete case file on 18 February 2011. The complete case file from the RFEC was received by the UCI on 24 February 2011.

8. The statement of appeal from the UCI was filed on 24 March 2011, within one month of the receipt of the complete file concerning Mr Contador. It follows that the appeal from the UCI was filed in due time and is admissible.

9. The statement of appeal from WADA was filed on 29 March 2011, within 21 days after the last day on which any other party in the case could have appealed. It follows that the appeal from WADA was filed in due time and is admissible.

Applicable Law

10. Article R58 of the Code provides as follows:

"The Panel shall decide the dispute according to the applicable regulations and 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".

11. Article 1 UCI ADR provides that *"These Anti-Doping Rules shall apply to all License-Holders".* Furthermore, pursuant to Article 2 UCI ADR "*Riders participating in International Events shall be subject to In-Competition Testing under these Anti-Doping Rules".*

12. The UCI ADR in the version that entered in force in 2010 shall be applicable to the present case as Mr Contador was tested on 21 July 2010.

13. Article 344 UCI ADR provides that *"[t]he CAS shall have full power to review the facts and the law. The CAS may increase the sanctions that were imposed on the appellant in the contested decision, either at the request of a party or ex officio"*. This provision finds an echo in Article R57 of the Code according to which *"[t]he Panel shall have full power to review the facts and the law. (...)".*

14. Article 345 UCI ADR provides that *"[t]he CAS shall decide the dispute according to these Anti-Doping Rules and additionally Swiss law".*

15. It follows that this dispute will be decided according to the UCI ADR and additionally Swiss Law.

Preliminary Issues

A. The Protected Witness

16. The parties' positions with respect to the issue of the protected/anonymous witness may be summarised as follows:

- On 11 May 2011, as previously announced in its appeal brief, WADA filed a witness statement from an anonymous witness. WADA indicated that such witness did not accept to reveal his/her identity as he/she feared the consequences his/her revelations may have for him/her and his/her family.
- The UCI did not object to the submission of the statement and the examination of this witness as a protected witness.
- Mr Contador considered that allowing an unnamed witness to provide evidence would be contrary to a fair hearing, notwithstanding the fact that such testimony is irrelevant in the present factual circumstances and that the present matter only concerns how clenbuterol entered Mr Contador's body while the witness statement of the anonymous witness deals with events that allegedly happened in 2005 and 2006 which are, according to Mr Contador, totally irrelevant to this case. Mr Contador therefore requested that such testimony be declared inadmissible or, alternatively, that the name of the witness be disclosed.
- The RFEC indicated it had no interest in knowing the identity of such witness. It requested to be able to put questions to him/her in an efficient manner, however preserving his/her identity.

17. The starting point to determine the applicable law on matters of evidence is – for all international arbitrations having their seat in Switzerland – Art. 184.1 of the Private International Law Act ("PILA").

18. Art. 184.1 of the PILA provides that the Panel *"… itself shall conduct the taking of evidence"*. The Panel considers that in keeping with this provision it is competent to decide whether or not a given evidence adduced by one of the parties is admissible or not (BERGER/KELLERHALS, International and Domestic Arbitration in Switzerland, 2nd ed, 2010, no 1205; POUDRET/BESSON, Comparative Law on International Arbitration, 2nd ed, 2007, no 643; KAUFMANN-KOHLER/RIGOZZI, International Commercial Arbitration, 2nd ed, 2010, no 478).

19. Inasmuch as the PILA (or the Code) contains a lacuna regarding the rules on evidence, the Panel has the powers to fill it. This follows from Art. 182.2 of the PILA, according to which the Panel is entitled to fill a (procedural) lacuna either *"directly or by reference to a statute or to rules of arbitration"*.

20. However, this power of the arbitral tribunal is not unlimited as has been expressed by a Panel in another CAS case (CAS 2009/A/1879, no. 102):

"Le pouvoir discrétionnaire de la Formation de combler toute lacune est – en l'absence de règles expresses dans les articles 176 ss LDIP et le Code TAS – limité que par l'ordre public procédural et les droits procédureaux des parties (Kaufmann-Kohler/Rigozzi, Arbitrage International, 2006, Rn. 464). Selon la jurisprudence du Tribunal Féedéral l'ordre public procédural n'est pas facilement violé. Selon le Tribunal Fédéral, l'ordre public procédural n'est violé que ,lorsque des principes fondamentaux et généralement reconnues ont été violés, ce qui conduit à une contradiction insupportable avec les valuers reconnues dans un Etat de droit (TF Bull ASA 2001, 566, 570)".

21. The issue of the anonymous witness is linked to the right to a fair trial guaranteed under Article 6 of the Convention for the Protection of Human Rights and Fundamental Freedoms of the Council of Europe (the "ECHR"), notably the right for a person to examine or have examined witnesses testifying against him or her (Article 6.3 ECHR). As provided under Article 6.1 ECHR, this principle applies not only to criminal procedures but also to civil procedures.

22. The Panel is of the view that even though it is not bound directly by the provisions of the ECHR (cf. Art 1 ECHR), it should nevertheless account for their content within the framework of procedural public policy.

23. In addition, it is noteworthy that Article 29.2 of the Swiss Constitution guarantees the same rights, aimed at enabling a person to verify and discuss the facts alleged by a witness.

24. Admitting anonymous witnesses potentially infringes upon both the right to be heard and the right to a fair trial of a party, since the personal data and record of a witness are important elements of information to have in hand when testing his/her credibility.

25. Furthermore, it is a right of each party to assist in the taking of evidence and to be able to ask the witness questions (KUKO-ZPO/SCHMID, 2011, Art. 155 no. 4; BSK-ZPO/GUYAN, 2010, Art. 155 no. 14; WEIBEL/NÄGELI, in: SUTTER-SOMM/HASENBÖHLER/LEUENBERGER, ZPO, 2011, Art. 155 no. 13 and 173 no. 2).

26. However, not all encroachments on the right to be heard and to the right to a fair trial amount to a violation of those principles or of procedural public policy. In a decision dated 2 November 2006 (ATF 133 I 33), the Swiss Federal Tribunal decided (in the context of criminal proceedings) that the admission of anonymous witness statements does not necessarily violate the right to a fair trial as provided under Article 6 ECHR.

27. According to the Swiss Federal Tribunal, if the applicable procedural code provides for the possibility to prove facts by witness statements, it would infringe the principle of the court's power to assess the witness statements if a party was prevented from the outset from relying on anonymous witness statements. The Swiss Federal Tribunal stressed that the ECHR case law recognises the right of a party to use anonymous witness statements and to prevent the other party from cross-examining such witness if *"la sauvergarde d'intérêts dignes de protection"*, notably the personal safety of the witness, requires it.

28. The Panel considers that these principles apply also to civil proceedings. The Panel is comforted in its view by the content of Art. 156 of the Swiss Code of Civil Procedure (CCP), which provides that a court is entitled to take all appropriate measures (cf DIKE-KOMM-ZPO/LEU, 2011, Art. 156 no. 12; KUKO-ZPO/SCHMID, 2011, Art. 156 no. 4; CPC-SCHWEIZER, 2011, Art. 156 no. 11 ff) if the evidentiary proceedings endanger the protected interests of one of the parties or of the witness.

29. There is no doubt that the personality rights as well as the personal safety of a witness form part of his/her interests worthy of protection (CPC-SCHWEIZER, 2011, Art. 156 no. 6). However, according to the predominant view an abstract danger in relation to these interests is insufficient. Rather there must be a concrete or at least a likely danger in relation to the protected interests of the person concerned (DIKE-KOMM-ZPO/LEU, 2011, Art. 156 no. 8). Furthermore, the measure ordered by the tribunal must be adequate and proportionate in relation to all interests concerned. The more detrimental the measure is to the procedural rights of a party the more concrete the threat to the protected interests of the witness must be.

30. Referring to ECHR case law (the *Doorson*, *van Mechelen* and *Krasniki* cases), the Swiss Federal Tribunal considered that the use of protected witnesses, although admissible, must be subject to strict conditions: the witness shall motivate his/her request to remain anonymous in a convincing manner; and the court must have the possibility to see the witness. In such cases, the right to a fair trial must be ensured through other means, namely a cross-examination through "audiovisual protection" and an in-depth verification of the identity and the reputation of the anonymous witness by the court. Finally, the Swiss Federal Tribunal stressed that the ECHR and its own jurisprudence impose that the decision is not "solely or to a decisive extent" based on an anonymous witness statement.

31. Again referring to the ECHR jurisprudence, the Swiss Federal Tribunal concludes that (i) the witness must be concretely facing a risk of retaliations by the party he/she is testifying against if his/her identity was known; (ii) the witness must be questioned by the court itself which must check his/her identity and the reliability of his/her statements; and (iii) the witness must be cross-examined through an "audiovisual protection system".

32. The above-mentioned jurisprudence and principles established by the ECHR and the Swiss Federal Court led CAS in a previous case and based on the merits and specific circumstances of that case to allow the testimonies of protected witnesses (CAS 2009/A/1920).

33. However, in this case, in light of the above-examined criteria, the Panel found that, in the form requested, the measure requested by WADA was disproportionate in view of all the interests at stake. In particular the Panel found that it was insufficiently demonstrated that the interests of the witness worthy of protection were threatened to an extent that could justify a complete protection of the witness' identity from disclosure to the Respondents, thus, curtailing the procedural rights of the Respondents to a large degree.

34. The Panel sought an alternative solution by proposing to the parties a manner of hearing and cross-examining the witnesses that it deemed would more adequately balance the interests at stake. The proposal would have enabled the Panel to be satisfied that it could hear the witness' testimony in a reliable form, while sufficiently accounting for Mr Contador's defence rights, including his counsels' need to prepare the cross examination in an efficient manner given the witnesses' severe accusations against Mr Contador. However, neither WADA nor Mr Contador agreed to the Panel's proposal.

35. Given the above circumstances and in light of all the submissions of the parties, the Panel decided to deny WADA's request to hear such witness without the disclosure of his/her identity to the opposing party.

B. Witness statement of Mr Javier Lopez

35. On the first day of the hearing (21 November 2011), the Respondents declared not to object the summary of Mr Lopez' expected testimony presented by WADA on 15 November 2011.

Admissibility of newly presented evidence

36. Mr Contador considered that the recently published news he filed on 16 November 2011, concerning cattle contamination in Denmark, established that clenbuterol contamination is a worldwide problem and that he intended to rely on such documents during the course of the hearing.

37. WADA considered the news story to be irrelevant. The meat in this news story was pork and not veal or beef. Furthermore, according to the article, Denmark only exported meat contaminated with salmonella and not clenbuterol-contaminated meat.

38. Considering the positions of both the Athlete and WADA, the Panel decided to admit the news story to the file, taking into account the position of WADA regarding its irrelevancy.

Merits

A. Applicable regulatory framework

39. According to Article 21 UCI ADR *"The following constitutes anti-doping rule violations:*

1. The presence of a Prohibited Substance or its Metabolites or Markers in a Rider's bodily Specimen.

1.1 It is each Rider's personal duty to ensure that no Prohibited Substance enters his body. Riders are responsible for any Prohibited Substance or its Metabolites or Markers found to be present in their bodily Specimens. Accordingly, it is not necessary that intent, fault, negligence or

knowing Use on the Rider's part be demonstrated in order to establish an anti-doping violation under article 21.1.

Warning:

1) Riders must refrain from using any substance, foodstuff, food supplement or drink of which they do not know the composition. It must be emphasized that the composition indicated on a product is not always complete. The product may contain Prohibited Substances not listed in the composition.

2) Medical treatment is no excuse for using Prohibited Substances or Prohibited Methods, except where the rules governing Therapeutic Use Exemptions are complied with.

1.2 Sufficient proof of an anti-doping rule violation under article 21.1 is established by either of the following: presence of a Prohibited Substance or its Metabolites or Markers in the Rider's A Sample where the Rider waives analysis of the B Sample and the B Sample is not analyzed; or, where the Rider's B Sample is analyzed and the analysis of the Rider's B Sample confirms the presence of the Prohibited Substance or its Metabolites or Markers found in the Rider's A Sample.

1.3 Excepting those substances for which a quantitative threshold is specifically identified in the Prohibited List, the presence of any quantity of a Prohibited Substance or its Metabolites or Markers in a Rider's Sample shall constitute an anti-doping rule violation.

1.4 As an exception to the general rule of article 21.1, the Prohibited List or International Standards may establish special criteria for the evaluation of Prohibited Substances that can also be produced endogenously.

1.5 The presence of a Prohibited Substance or its Metabolites or Markers consistent with the provisions of an applicable Therapeutic Use Exemption issued in accordance with the present Anti-Doping Rules shall not be considered an anti-doping rule violation.

2. (…)".

40. On 21 July 2010, at the occasion of the second rest day of the 2010 Tour de France, following the 16th stage, Mr Contador was subjected to a doping test and requested to file a urine sample. Both the A and B test results were positive for clenbuterol. Clenbuterol is a non-threshold prohibited substance that appears in Article S1.2 *(other Anabolic Agent)* of the 2010 WADA Prohibited List.

41. Article 22 UCI ADR provides the following regarding the burden and standard of proof applicable to anti-doping organisations in order to establish an anti-doping rule violation:

"The UCI and its National Federations shall have the burden of establishing that an anti-doping rule violation has occurred. The standard of proof shall be whether the UCI or its National Federation has established an anti-doping rule violation to the comfortable satisfaction of the hearing panel bearing in mind the seriousness of the allegation which is made. This standard of proof in all cases is greater than a mere balance of probability but less than proof beyond a reasonable doubt. Where these Anti-Doping Rules place the burden of proof upon the License-Holder alleged to have committed an anti-doping rule violation to rebut a presumption or establish specified facts or circumstances, the standard of proof shall be by a balance of probability, except as provided in articles 295 and 305 where the License-Holder must satisfy a higher burden of proof".

42. The Panel notes that Articles 295 (concerning the regime of elimination or reduction of the period of ineligibility for specified substances under specific circumstances) and 305 (aggravating circumstances) UCI ADR do not apply in the present matter.

43. In his answer, Mr Contador states that *"in circumstances where the concentration of the Prohibited Substance is extremely low, as in this case, and deliberate use is ruled out, the presence of the Prohibited Substance alone is sufficient to establish that an anti-doping rule violation has occurred".*

44. It is therefore undisputed that Mr Contador has committed an anti-doping rule violation and that the Appellants have met the standard of proof given the analytical reports made by the Cologne Laboratory and the confirmation of the adverse analytical finding by the B Sample.

45. Article 293 UCI ADR determines the consequence of an anti-doping rule violation:

"The period of Ineligibility imposed for a first anti-doping rule violation under article 21.1 (Presence of a Prohibited Substance or its Metabolites or Markers), article 21.2 (Use or Attempted Use of a Prohibited Substance or Prohibited Method) or article 21.6 (Possession of a Prohibited Substance or Prohibited Method) shall be

2 (two) years' Ineligibility

unless the conditions for eliminating or reducing the period of Ineligibility as provided in articles 295 to 304 or the conditions for increasing the period of Ineligibility as provided in article 305 are met".

46. The Athlete seeks to eliminate or reduce the 2-year period of ineligibility based on Articles 296 and 297 UCI ADR. These Articles provide the following:

Article 296 UCI ADR:

"If the Rider establishes in an individual case that he bears No Fault or Negligence, the otherwise applicable period of Ineligibility shall be eliminated. When a Prohibited Substance or its Markers or Metabolites is detected in a Rider's Sample as referred to in article 21.1 (presence of a Prohibited Substance), the Rider must also establish how the Prohibited Substance entered his system in order to have the period of Ineligibility eliminated. In the event this article is applied and the period of Ineligibility otherwise applicable is eliminated, the anti-doping rule violation shall not be considered a violation for the limited purpose of determining the period of Ineligibility for multiple violations under articles 306 to 312".

Article 297 UCI ADR:

"If a License-Holder establishes in an individual case that he bears No Significant Fault or Negligence, then the period of Ineligibility may be reduced, but the reduced period of Ineligibility may not be less than one-half of the period of Ineligibility otherwise applicable. If the otherwise applicable period of Ineligibility is a lifetime, the reduced period under this section may be no less than 8 (eight) years. When a Prohibited Substance or its Markers or Metabolites is detected in a Rider's Sample as referred to in article 21.1 (presence of Prohibited Substance), the Rider must also establish how the Prohibited Substance entered his system in order to have the period of Ineligibility reduced".

47. The strict liability principle of the above-quoted Article 21.1.1 UCI ADR is applicable to the present dispute. The contention that the prohibited substance did not have a performance

enhancing effect on the Athlete and that he must have ingested the substance inadvertently does not preclude the application of the strict liability principle.

48. Consequently, pursuant to Articles 22, 296 and 297 UCI ADR and according to established CAS jurisprudence (CAS 2005/A/922, 923 & 926, CAS 2006/A/1067, CAS 2006/A/1130), in order for the athlete to escape a sanction, the burden of proof shifts to the athlete who has to establish;

1) how the prohibited substance entered the athlete's system; and

2) that the athlete in an individual case bears no fault or negligence, or no significant fault or negligence.

49. Pursuant to Art. 22 UCI ADR, and as it is for the athlete to establish the above mentioned facts:

"Where these Anti-Doping Rules place the burden of proof upon the License-Holder alleged to have committed an anti-doping rule violation to rebut a presumption or establish specified facts or circumstances, the standard of proof shall be by a balance of probability, (…)".

B. The issues that need to be decided

50. As already explained, the results of the tests and the presence of the Prohibited Substance in Mr Contador's body were not contested. Therefore, pursuant to the regulatory framework as described above and the submission of the parties, the main questions to be resolved by the Panel in the present dispute are:

a. Taking into account that an anti-doping rule violation has been established by the Appellants, did Mr Contador establish, considering the required standard of proof, how the prohibited substance entered his system?

b. If Mr Contador is able to convince the Panel with the required standard of proof how the prohibited substance entered his system, does he, in such circumstances, bear no fault or negligence or no significant fault or negligence?

c. If necessary, what must be the sanction imposed on Mr Contador? Particularly, how long shall the period of ineligibility last, when would such period commence and which results would have to be disqualified, leading to loss of prize money and ranking points?

C. The application of the burden and standard of proof in the circumstances of this case

51. As previously explained, in this case Mr Contador alleges that the Prohibited Substance entered his body as a result of eating a piece of contaminated meat (without the Athlete knowing that the meat was contaminated).

52. Although arguing that under the UCI ADR they are under no duty to establish how the Prohibited Substance entered the Athlete's body, the Appellants nevertheless decided to put

forward alternative theories as to the possible sources of the Prohibited Substance and to try and establish that those sources were more likely to be the reason for the presence of the Prohibited Substance in the Athlete's system than the ingestion of allegedly contaminated meat.

53. Therefore, the Panel will begin by examining how the term "balance of probability" shall be interpreted and how the framework regarding the burden and standard of proof is to be applied in a case in which the Appellants do not limit themselves to arguing that the Respondent has failed to establish the reality of his own contentions regarding how the Prohibited Substance entered his body. As these various issues are closely related, they will be dealt with together.

a) UCI

54. In its appeal brief of 18 April 2011, the UCI alleges that it is neither the burden of the UCI to suggest possible routes of ingestion, nor to show how likely any of the possible routes of ingestion might be. To the contrary, it is the burden of Mr Contador to show that his thesis of meat contamination is correct, or at least, that 1) his thesis of meat contamination is more likely than any other possible route of ingestion; and 2) meat contamination is more likely to have occurred than not to have occurred. Therefore, the UCI does not have the burden to show that another possible route of ingestion exists and is more likely than the route proposed by Mr Contador (meat contamination).

55. According to the UCI, meeting the standard of the balance of probability means that it is established that something is more likely to have happened than not to have happened. For the purpose of having the period of ineligibility eliminated under Article 296 UCI ADR or reduced under Article 297 UCI ADR, Mr Contador puts forward one single possibility as the route of ingestion. The circumstance that such route of ingestion is materially possible and can explain as such the presence of clenbuterol is not enough to satisfy the standard of balance of probability; Mr Contador has to show that this possible route of ingestion is more likely to have happened than not to have happened.

56. Where various possible routes of ingestion exist, the circumstances of the particular case will provide indications for the greater or lesser degree of likelihood of each of them. The result of the assessment and comparison of the degree of likelihood of each of the possible routes of ingestion may be that one of these possible routes of ingestion is accepted as being more likely than any of the other possibilities.

57. However, the burden of proof that is on Mr Contador is not met by merely alleging and invoking evidence that a given route of ingestion occurred; in addition to that he has to show that this contended route of ingestion, as such, is more likely to have occurred than not to have occurred. It is in this way the UCI understands § 5.9 of *CAS 2009/A/1930*:

"In view of these provisions, it is the Panel's understanding that, in case it is offered several alternative explanations for the ingestion of the prohibited substance, but it is satisfied that one of them is more likely than

not to have occurred, the Player has met the required standard of proof regarding the means of ingestion of the prohibited substance. In that case, it remains irrelevant that there may also be other possibilities of ingestion, as long as they are considered by the Panel to be less likely to have occurred. In other words, for the Panel to be satisfied that a means of ingestion is demonstrated on a balance of probability simply means, in percentage terms, that it is satisfied that there is a 51% chance of it having occurred. The Player thus needs to show that one specific way of ingestion is marginally more likely than not to have occurred".

b) WADA

58. WADA alleges in its appeal brief of 18 April 2011 that the balance of probability standard entails that the athlete has the burden of convincing the Panel that the occurrence of the circumstances on which the athlete relies is more probable than their non-occurrence. WADA also refers to § 5.9 of *CAS 2009/A/1930*.

59. According to WADA, the first instance body did not apply this test correctly and erred as it considered, in essence, that the food contamination was established because no contrary explanation was supposedly proven. The first instance body placed *de facto* the burden of proof upon the anti-doping organisation instead of upon the athlete; the assumption of food contamination alleged by Mr Contador was accepted because it was not excluded by other evidence. Such reasoning is contrary to the balance of probability test: the question is not to know if the theory of the athlete can be excluded, but rather to determine if it is more likely than not that the alleged scenario has occurred.

60. The Decision seems to be based on the erroneous assumption that the UCI and WADA are required to eliminate the theoretical possibility of a case of clenbuterol-contamination meat in Europe, Spain or the Basque Country, whereas in reality it is the Athlete who has the burden of proving that it is more likely than not that the meat he ate was contaminated with clenbuterol.

61. In his closing submissions, WADA's Counsel alleged that the fact that WADA is the Appellant and it put forward and tried to establish alternative theories and possibilities to the theory of the Respondent, does not, in any way, effect the principle of who bears the burden of proof in this case. The question remains if the burden of proof was met by the Athlete.

62. According to WADA an adequate subscription of the balance of probability is given in *CAS 2008/A/1515*, p. 23, no. 116, according to which *"the balance of probability standard entails that the athlete has the burden of persuading the Panel that the occurrence of the circumstances on which the athlete relies is more probable than their non-occurrence or more probable than other possible explanations of the positive testing (see e.g. CAS 2006/A/1067, para. 6.8; CAS 2007/A/1370 & 1376, para. 127)"*. The Athlete's theory must be established taking into account other alleged possibilities, but the Panel must be careful not to shift the burden to the Appellants.

63. The Athlete must prove more than only a mere possibility of the occurrence of his theory; he has to prove how the prohibited substance entered his system. The Athlete has to establish

facts that could convince the Panel, on a balance of probabilities, that indeed, in this case: (a) he ate contaminated meat; and (b) the contaminated meat was indeed the source of the prohibited substance found in his body. Here, the missing link in the Athlete's theory, according to WADA, is proof that the meat he ate was contaminated.

c) Mr Contador

64. In his answer of 8 July 2011, Mr Contador's primary submission is that he has shown enough evidence that it was more likely than not that clenbuterol originated from contaminated meat that he ate. Rather than conceding the likelihood that contaminated meat was the cause of his positive test, the Appellants have proposed various alternatives during various stages of the proceedings against him, no matter how unlikely those alternatives may have been. The Appellants focus their appeal predominantly on their blood transfusion theory, while their supplements theory is merely a fall-back position. This approach appears to be aimed at countering the Athlete's contention that clenbuterol came from contaminated meat.

65. It is notable that the Appellants have not actually ruled out contaminated meat as a possibility (because they cannot do so) but that they have merely asserted that the blood transfusion theory and the supplement theory are more likely to have been the source of the prohibited substance. This leaves the Panel faced with a choice of three possibilities as to how the clenbuterol entered the Athlete's system.

66. The Athlete alleges that even though Swiss law governs this arbitration, the "balance of probability" standard applicable to this dispute is a common law concept. Under Swiss law, the standard of proof is governed by the rules of law applicable to the merits of the dispute, here Swiss law and the UCI ADR. Under Swiss substantive law, the standard of proof is either the default standard generally referred to as the *"judge's persuasion"* (*"conviction du juge"*) or any lower standard of proof if so provided for by the relevant substantive rule itself or by the courts. In any event, the actual standard of proof to be applied to a specific fact must be determined taking into account the meaning and the spirit of the law. In particular, a reduced standard of proof must apply when procedural fairness (*prozessuale Billigkeit*) so requires, for example because the relevant facts are particularly difficult to establish.

67. The following reduced standards of proof (*preuve facilitée*) are generally applied under Swiss law:

    a) high likelihood/plausibility (haute vraisemblance; hohe Wahrscheinlichkeit), which *"is fulfilled when according to the judge's assessment there is no serious room left for any version of facts diverging from the alleged version"*.

    b) Simple likelihood/plausibility (*vraisemblance; einfache Wahrscheinlichkeit, Glaubhaftmachung*), which is satisfied when the existence of a fact is supported by important/significant elements, even if the judge cannot rule out that – based on less important/significant elements – the alleged fact did actually not occur.

68. Several provisions of Swiss substantive law explicitly call for the application of such a reduced standard of proof. In the present case, the relevant substantive provision is Article 22 UCI

ADR, which sets forth a reduced standard of proof of "balance of probability". This reduced standard of proof is based on the WADC and is deliberately different from that generally used under Swiss law. Indeed, the original French translation of the WADC refers neither to *"vraisemblance"* nor to *"haute vraisemblance"* and rather uses the very different phrase *"simple prépondérance des probabilitiés"*.

69. It is thus submitted that the WADC – which was originally drafted in English by common law lawyers – used the words "balance of probability" to indicate the well-known standard of proof principle that applies in common law jurisdictions. The application of this lower standard of proof is not inconsistent with Swiss law since, as mentioned above, Swiss law provides that the standard of proof is an issue governed by the rules of law applicable to the merits of the dispute.

70. In his legal opinion, Professor Riemer confirms that, as an association incorporated in Switzerland, the UCI is indeed entitled to provide for a specific standard of proof which does not necessarily correspond to the standard of proof that would be applicable before Swiss courts. Accordingly, the Athlete referred to common law cases to illustrate how the "balance of probability" must be applied.

71. In arguing their case as to other possible causes of the adverse analytical finding, the Appellants fundamentally mischaracterise and/or misunderstand the operation of the burden and standard of proof in a context such as the present one. As a matter of principle, the starting point is that the legal burden of proving an offence is on the accusing regulatory authority. Where a regulatory authority accuses an individual of a doping offence, the standard of proof required of the regulatory authority for a finding of guilt is "comfortable satisfaction". That is not as high as the criminal standard of "beyond reasonable doubt", but is a higher standard than the private law standard of the "balance of probabilities". This is due to the seriousness of the charge of cheating and the consequences that a conviction entails. This is reflected in Article 22 UCI ADR.

72. The importance and difficulty of the struggle against doping in sport has however brought about a qualification to these two normal indispensable precepts of justice. That qualification is that once a strict liability doping offence is established by demonstrating no more than the presence of a prohibited substance in an athlete's sample, the burden shifts onto the athlete to establish how the substance came into his body and that he bore no fault or negligence for its presence (see Article 296 UCI ADR and Article 10.5.1 WADC). In essence, the athlete must prove his innocence. This significant incursion into the rights of the accused is however justified by the need to protect sport and the difficulty faced by the regulatory authority to actively prove the method of ingestion and the athlete's degree of fault.

73. That this is such a significant incursion is reflected, first of all, in the fact that the standard of proof that the athlete has to discharge in these circumstances is described as the balance of probabilities (see Article 22 UCI ADR and Article 3.1 WADC). It would not be justifiable to require a higher standard from the athlete because, against the background of strict liability and the difficulties already faced by the athlete in relying on Article 296 UCI ADR, that would

be a step too far. The anti-doping regulations are proportionate, but only just so. They are balanced, but on the edge of the precipice of unfairness and arbitrariness.

74. According to Mr Contador, the issue of whether something has happened in the past cannot be subjected to any measure of probability: it either already happened or it did not. It is important to bear this in mind when one seeks to understand and apply the concept of a balance of probabilities to an *ex post*, historical, analysis. What an *ex post* analysis involves is ascertaining what is most likely to have happened, on the basis of all the evidence available after it has happened. It is critical then to that exercise that one does not confuse the probability of something happening *ex ante* (in the future) with the evaluation of evidence as to what happened *ex post* (in the past). Not making that distinction would produce an invalid result. To examine only the future likelihood of meat being contaminated with clenbuterol and being eaten by an athlete who is then tested would produce a wholly invalid result, because it would not take into account the evidence that the athlete did in fact eat meat and was tested and did test positive for clenbuterol in circumstances where everyone accepts that deliberate ingestion can be ruled out, so indicating that meat contamination is likely or at least possible. Put differently, the proposition that something happens only rarely does not advance matters if other evidence indicates that this may have been one of those rare occasions. The fact that someone is unlikely to be struck by lightning is of no relevance when a person is found dead in a field with a scorch mark from head to toe.

75. The second factor that is critical to the exercise is that the assessment as to which of the proposed scenarios is the most likely cannot be undertaken in the abstract. Rather, it is necessarily a comparative assessment. The hypothesis advanced on the evidence by the party bearing the burden (here the Athlete) must be compared to the rival hypotheses (to the extent that any others exist). While the Athlete contends that there is in fact only one possibility (meat contamination), the Appellants contend that (1) it is unlikely that clenbuterol came from contaminated meat; and (2) two other potential sources also fall to be considered (blood transfusion and supplements). There are no other possibilities alleged by the parties; clenbuterol can only have entered the Athlete's system by one of these three routes of ingestion. The Panel's task is to make a decision as to which of those three is the most likely to have caused the positive test. That comparative exercise may bring the decision-maker to a conclusion which had it been measured *ex ante*, might have been thought improbable.

76. Finally, to the extent that there is any disagreement or ambiguity as to the application of the balance of probability, the principle of *contra preferentem* applies, such that the construction to be preferred is the one that favours the Athlete.

77. There is a further relevant aspect regarding the way in which the common law standard of balance of probability operates. That is the concept of the "evidential" as opposed to the "legal" burden. Where a party has a legal burden, it may of course satisfy that burden in a range of ways. At one extreme the party may only just satisfy the burden; at the other extreme the hypothesis advanced may be shown to be nearly certainly correct. In seeking to discharge the burden, the party comes to a point, in a sense a "tipping point", where the material that the party has put forward in support of the hypothesis advanced would, without more, be

sufficient to convince the decision maker that the hypothesis was correct. The "legal" burden would be discharged. At that point, the other party shoulders an "evidential", or practical, burden: it must adduce contrary evidence that sufficiently contradicts the hypothesis advanced to tip the balance back, or lose the case on the evidence. That is, of course, what the Appellants have set out to do in first criticising the hypothesis advanced by the Athlete that the source was contaminated meat, and secondly advancing the alternative hypothesis that a contaminated plasma transfusion was the cause, together with their fall-back position, that a contaminated supplement might have been the cause.

78. It is not sufficient for the Appellants simply to raise an alternative scenario, uncorroborated, and then to say that the Athlete must disprove it; doing so amounts to no more than mere speculation. If the Appellants' objective, as it appears to be, is to contradict the Athlete's alleged more likely scenario to a degree that tips the evidence back in their favour, they must present sufficient proof; and in assessing whether they have done this, two things need to be borne in mind:

a) The normal standard imposed on regulatory authorities at the outset is of course "comfortable satisfaction". Further, it is that standard that applies where a burden has shifted from the athlete back onto the regulatory authority. On no basis, therefore, would it be sufficient for the regulatory authorities simply to raise speculative alternatives.

b) When an athlete is seeking to establish the source of a substance on the balance of probabilities, CAS panels have accepted submissions from the authorities to the effect that a mere speculation as to a source is insufficient (see CAS 2006/A/1130 and CAS 2007/A/1413). The principle of equal treatment requires authorities to be held to the same high standards. So here, for example, when the Appellants speculate without any evidence whatsoever that the source may have been a contaminated supplement, CAS must remember the scepticism with which it would regard a similar argument coming from an athlete.

d) RFEC

79. The RFEC alleges that the UCI and WADA in their appeal briefs state that the burden of proof is on Mr Contador, and that it is not met by indicating the most likely route of ingestion, since the Athlete must demonstrate that this route of ingestion is more likely to have occurred than not to have occurred; the RFEC ends this argument with the following assertion, *"Indeed the circumstance that a possibility is more likely than other possibilities does not mean that this relatively more likely possibility is also more likely to have occurred than not to have occurred"*.

80. According to Article 296 UCI ADR and the arguments made by both the UCI and WADA, the Athlete is required to prove in this case, not only that he ate meat as the most likely possibility of the presence of clenbuterol in his bodily samples, but also that it contained clenbuterol (and that this substance is also the one that appeared in the adverse analytical finding) so there is a direct relation between the presence of the substance in his bodily sample and the one that, in turn, had been fed to the animal which meat was eaten by the

Athlete, something which is quite impossible, since the single piece of evidence has disappeared, *i.e.* the meat. Adducing this particular element of evidence, obviously, is impossible for the Athlete and, if it is unfeasible, cannot be demanded by international organisations of Mr Contador or of other athletes. Otherwise, not only is the *"onus probando"* reversed but in many cases the proof becomes a *"probatio diabolica"*, due to having to prove the non-existence of alleged acts.

81. Therefore, it is necessary to make an appropriate and prudent interpretation and application of the provisions set forth in Article 22 UCI ADR, accounting for both science and the law when assessing the balance of probabilities. In achieving this two preliminary considerations must be accounted for:

a) First, given the universal principle of the presumption of innocence; nobody can be convicted without benefitting from due process; i.e. from a proceeding that respects the principles of a fair hearing, of equality and of the right to be heard.

b) Second, the different value of the evidence presented at the stage of proceedings before the CNCDD of the RFEC.

82. In this case, two opposing sets of scientific evidence are confronted, which are relevant when it comes to assessing the situation.

83. On the one hand, the tests of the Cologne Laboratory, which has the most advanced technology in the world to detect clenbuterol below the levels required of other laboratories (2 pg/mL), prove the presence of clenbuterol in the bodily sample of the Athlete, but do not enable to determine how it entered the latter's body, despite such determination being necessary because of the strict liability principle.

84. On the other side, the evidence produced by the Athlete, who has made considerable efforts to adduce written expert evidence of a type which would not even be accessible to more than a few professional athletes with significant income, and who has thus scientifically proven before the CNCDD of the RFEC that the cause of the adverse analytical finding was a food contamination, even though this origin can only remain a probability due to the absence of any direct and positive proof. This probability prevails over other scenarios, in light of the evidence presented by the Athlete.

85. Furthermore, although it is true that authoritative scholars and the jurisprudence of CAS qualify the criteria laid down under the WADC as entailing the strict liability of athletes, this does not mean that the subjective element is completely absent in the interpretation of the standard. It only means that the "onus probando" is inversed. An athlete can escape sanctioning nonetheless if he/she proves that: a) there is absence of fault or no significant fault (Article 9 WADC); and b) he/she did not seek to improve his/her performance (Article 10.4 WADC). In this case, the problem is that both parameters are subject to interpretation.

86. If one wants a cold justice, scientific and detached from the fundamental principles of the sanctioning law and from fundamental human rights, the judge, in this case the Panel, should give priority to the literal meaning of the words and direct evidence. If, however, one aspires

to a different, more human and equitable sports justice, which respects and protects the fundamental rights of athletes to participate in doping-free activities, to promote their health and always ensure equity and equality in sports, the award must be based on the purpose or will of the legislator, favouring judicial discretion to the detriment of the ultimate predictability of the award.

87. The RFEC emphasises that the evidence put forward in the proceedings before the CNCDD was different from the evidence put forward in the present CAS proceeding. The procedure followed before the CAS allows the parties, according to Article R57 of the Code, to bring new evidence that has not been presented and examined in the first instance proceeding and is not known to this party. Accordingly, it is clear that one faces two different evidentiary scenarios, one which arose in front of the disciplinary body of the federation of which the Athlete is a member (the CNCDD of the RFEC) and another which is submitted in the appeal to the CAS. Therefore, the balance of probabilities discussed in the first instance by the CNCDD of the RFEC could have some variation in light of new evidence presented in this second instance, to which the sanctioning body of the RFEC never had access.

88. Even though the CNCDD of the RFEC made its decision on the basis of a different evidentiary scenario from the one elaborated in front of the CAS, i.e. taking into account the evidence presented by the Athlete and the absence of other evidence apart from the adverse analytical finding itself, the new evidence presented by the Appellants on appeal in front of the CAS is insufficient to tip the balance of probability towards an anti-doping rule violation by food contamination. Thus, the determination of the CNCDD of the RFEC as to the balance of probabilities was correct in the first instance and remains valid.

e) Position of the Panel

ea) The point of departure

89. The Panel notes that it is not in dispute that the Appellants successfully established that Mr Contador committed an anti-doping rule violation. Neither is it disputed that in order for the Athlete to escape a two-year sanction, he must establish, on a balance of probability:

- how the Prohibited Substance entered the Athlete's system; and
- that he bears no fault or negligence, or no significant fault or negligence.

90. Consequently, the burden of proof shifts to the Athlete and the standard of proof for the Athlete to establish his theory how the prohibited substance entered his body is, pursuant to Article 22 UCI ADR, on a *"balance of probability"*.

91. The parties to these proceedings are in dispute as to how the term "burden of proof" is to be understood and what obligations derive therefrom.

92. The applicable regulations do not define the term "burden of proof".

93. Despite the notion of "burden of proof" being tied to the taking of evidence, the predominant scholarly opinion is that – in international cases – burden of proof is governed by the *lex causae*, i.e. by the law applicable to the merits of the dispute and not by the law applicable to the procedure (POUDRET/BESSON, Comparative Law of InternationalArbitration, 2nd ed, 2007, no 643; KAUFMANN-KOHLER/RIGOZZI, Arbitrage International, 2nd ed., 2010, no 653a; BERGER/KELLERHALS, International and Domestic Arbitration in Switzerland, 2nd ed, 2010, no 1203).

94. Therefore, the first question to be determined is which is the applicable law to the merits, other than the UCI Regulations, to which the Panel can turn for any necessary clarifications concerning the content of the "burden of proof".

95. While Art. 345 UCI ADR points – at least subsidiarily – to Swiss Law, Art. 369 of the UCI ADR provides that *"[T]hese Anti-Doping Rules shall be interpreted as an independent and autonomous text and not by reference to existing law or statutes"*. Despite the contradiction in the regulations the Panel will seek guidance from Swiss law to the extent that this is compatible with international standards of law.

96. Under Swiss law, the "burden of proof" is regulated by Art. 8 of the Swiss Civil Code (CC), which, by stipulating which party carries such burden, determines the consequences of the lack of evidence, i.e. the consequences of a relevant fact remaining unproven (*non liquet*, cf. BSK-ZGB/SCHMID/LARDELLI, 4th ed., 2010, Art 8 no. 4; KuKO-ZGB/MARRO, 2012, Art. 8 no. 1).

97. Indeed, Art. 8 CC stipulates that, unless the law provides otherwise, each party must prove the facts upon which it is relying to invoke a right, thereby implying that the case must be decided against the party that fails to adduce such evidence. Furthermore, the burden of proof not only allocates the risk among the parties of a given fact not being ascertained but also allocates the duty to submit the relevant facts before the court/tribunal. It is the obligation of the party that bears the burden of proof in relation to certain facts to also submit them to the court/tribunal (ATF 97 II 216, 218 E. 1; BSK-ZGB/SCHMID/LARDELLI, 4th ed., 2010, Art. 8 no. 31; DIKE-ZPO/GLASL, 2011, Art 55 no. 15).

98. The question of who bears the risk of a certain fact not being ascertained only comes into consideration if the fact submitted by the party bearing the burden of proof is contested by the other party.

99. Therefore, a crucial question is what efforts a party must make in order to validly contest the allegations made by the other party.

100. According to Swiss Law a valid contestation of facts needs to be specific, i.e. it must be directed and attributable to an individual fact submitted by the party bearing the burden of proof (DIKE-ZPO/LEU, 2011, Art 150 no. 59). Whether in addition to that, the contesting party needs to substantiate its submission, in particular whether the contesting party is under an obligation to give an explanation of why it thinks that the facts it contests are wrong, is not

clearly regulated. The new CPC appears to point in that direction (DIKE-ZPO/LEU, 2011, Art 150 no. 59). However, the threshold for meeting such an obligation to specify the contestation is – under normal circumstances – rather low, since it must be avoided that the prerequisites for contesting an allegation result in a reversal of the burden of proof (BSK-ZPO/GUYAN, 2010, Art 150 no. 4; BSK-ZGB/SCHMID/LARDELLI, 4th ed, 2010, Art. 8 no. 30).

101. Nevertheless, there are exceptions to this low threshold.

102. The exceptions concern cases in which a party is faced with a serious difficulty in discharging its burden of proof ("état de nécessité en matière de preuve", "Beweisnotstand"). A cause for the latter may be that the relevant information is in the hands or under the control of the contesting party and is not accessible to the party bearing the burden of proof (cf. ATF 117 Ib 197, 208 *et seq*.). Another reason may be that, by it very nature, the alleged fact cannot be proven by direct means. This is the case whenever a party needs to prove "negative facts".

103. According to the Swiss Federal Tribunal in such cases of "Beweisnotstand" principles of procedural fairness demand that the contesting party must substantiate and explain in detail why it deems the facts submitted by the other party to be wrong (ATF 106 II 29, 31 E. 2; ATF 95 II 231, 234; ATF 81 II 50, 54 E. 3; FT 5P.1/2007 E. 3.1; KuKO-ZGB/MARRO, 2012, Art. 8 no. 14; CPC-HALDY, 2011, Art. 55 no. 6). The Swiss federal Tribunal has described in the following manner (ATF 119 II 305, 306 E. 1b) this obligation of the (contesting) party to cooperate in elucidating the facts of the case:

"Dans une jurisprudence constante, le Tribunal fédéral a précisé que la règle de l'art. 8 CC s'applique en principe également lorsque la preuve porte sur des faits négatifs. Cette exigence est toutefois tempérée par les règles de la bonne foi qui obligent le défendeur à coopérer à la procédure probatoire, notamment en offrant la preuve du contraire (ATF 106 II 31 consid. 2 et les arrêts cités). L'obligation, faite à la partie adverse, de collaborer à l'administration de la preuve, même si elle découle du principe général de la bonne foi (art. 2 CC), est de nature procédurale et est donc exorbitante du droit fédéral – singulièrement de l'art. 8 CC –, car elle ne touche pas au fardeau de la preuve et n'implique nullement un renversement de celui-ci. C'est dans le cadre de l'appréciation des preuves que le juge se prononcera sur le résultat de la collaboration de la partie adverse ou qu'il tirera les conséquences d'un refus de collaborer à l'administration de la preuve".

104. In its decision the Swiss Federal Tribunal makes it clear that difficulties in proving "negative facts" result in a duty of cooperation of the contesting party. The latter must cooperate in the investigation and clarification of the facts of the case. However, according to the Swiss Federal Tribunal the above difficulties do not lead to a re-allocation of the risk if a specific fact cannot be established. Instead, this risk will always remain with the party having the burden of proof.

105. Furthermore, the Swiss Federal Tribunal states that in assessing and determining whether or not a specific fact can be established, the court must take into account whether or not the contesting party has fulfilled its obligations of cooperation.

106. The Panel considers that the foregoing interpretation of the concept of "burden of proof" is compatible with international standards of law and therefore should apply in these proceedings and that by applying the above principles any danger that the First Respondent would be burdened with a kind of *"probatio diabolica"* – as feared by the RFEC – can be avoided.

eb) Applying the above principles to the case at hand

107. In the case at hand the First Respondent has – according to the applicable provisions – the burden of proof to establish how the prohibited substance entered his system.

108. In the context of discharging this burden of proof the First Respondent submits that he ate contaminated meat. Proving this fact is – from an objective view – difficult, since the meat that was allegedly contaminated is of course no longer available for inspection. Furthermore, none of the teammates of First Respondent that ate the meat were tested along with the First Respondent. Therefore, direct proof that the First Respondent ate contaminated meat resulting in an adverse analytical finding is not possible.

109 Hence, the First Respondent can only succeed in discharging his burden of proof by proving that (1) in his particular case meat contamination was possible and that (2) other sources from which the Prohibited Substance may have entered his body either do not exist or are less likely. The Panel finds that the latter involve a form of negative fact that is difficult to prove for the First Respondent. Since in such respect the First Respondent is in a type of "état de nécessité en matière de prevue" or "Beweisnotstand", the above mentioned principles apply, according to which the party contesting the facts must contribute through substantiated submissions to the clarification of the corresponding facts of the case.

110. The Panel finds that the Appellants have fulfilled their obligation of cooperation by submitting and substantiating two additional (alternative) routes as to how the prohibited substance could have entered the First Respondent's system. The Panel will therefore examine whether in view of all of the parties' submissions and evidence (1) the ingestion of contaminated meat by the First Respondent was possible and (2) which of the three suggested scenarios is most likely to have occurred.

111. In the context of the allegations relating to point (2), the Panel underlines that in light of the jurisprudence of the Swiss Federal Tribunal the Appellants do not have the burden of establishing that other alternative scenarios caused the adverse analytical finding, since the risk that the Respondents' scenario cannot be ascertained remains with them. The likelihood of alleged alternative scenarios having occurred is, however, to be taken into account when determining whether the Athlete has established, on a balance of probabilities, that the source he is alleging of entry into his system of the Prohibited Substance is the more likely. It is in this manner that the Panel understands § 5.9 of *CAS 2009/A/1930*.

112. This implies that if, after carefully assessing all the alternative scenarios invoked by the parties as to the source of entry of the Prohibited Substance into the Athlete's system, several of the alleged sources are deemed possible, they have to be weighed against one another to determine whether, on balance, the more likely source is the one invoked by the Athlete. However, in the extreme situation that multiple theories were held to be equally probable, the burden of proof, i.e. the risk that a certain fact upon which a party relies cannot be established, would rest with the Athlete.

113. Thus, it is only if the theory put forward by the Athlete is deemed the most likely to have occurred among several scenarios, or if it is the only possible scenario, that the Athlete shall be considered to have established on a balance of probability how the substance entered his system, since in such situations the scenario he is invoking will have met the necessary 51% chance of it having occurred.

D. The Meat Contamination Scenario

114. Mr Contador alleges that the presence of clenbuterol in his system originated from eating contaminated meat. As determined above, it is for Mr Contador to establish on a balance of probability that this was the source of the presence of clenbuterol in his bodily Sample of 21 July 2010.

115. Therefore, the Panel will carefully assess this scenario first.

116. The meat contamination scenario as alleged by the Athlete is based on the following sequence of events, which will be dealt with separately below:

a) the Athlete ate meat on both 20 and 21 July 2010;

b) there are sufficient grounds and evidence to consider that the meat the Athlete ate was contaminated with clenbuterol;

c) consuming clenbuterol-contaminated meat in the specific circumstances of this case will cause a positive doping test.

a) Did the Athlete eat meat on both 20 and 21 July 2010?

117. In its written submissions, WADA stated that it is prepared to accept that Mr Cerrón, an acquaintance of Mr Contador, purchased meat from Larrezabal butcher's in Irún, Spain, during the late afternoon of 20 July 2010, and that such meat was then transported on the same day to Pau in France. It is also agreed by the parties that the meat which was purchased weighed 3.2 kg.

118. By letter of 27 July 2011, both Appellants informed the Panel that they also agreed to the fact that Mr Contador consumed the purchased meat on the evening of 20 July 2010 and at

lunchtime on the following day, on the basis of the evidentiary measures provided by the Athlete before CAS.

119. The Panel therefore accepts, based on the agreement between the parties as to those facts, that on the evening of 20 July 2010 and at lunchtime on 21 July 2010 Mr Contador ate the meat that was bought by Mr Cerrón at Larrezabal butcher's in Irún, Spain.

b) Possibility that the meat the Athlete ate was contaminated with clenbuterol?

120. In its appeal brief of 18 April 2011, the UCI stated that it referred to and endorsed WADA's appeal brief and exhibits on the possibility of meat contamination. Therefore, reference will only be made to the UCI's position in as far as it differs from the position of WADA.

121. WADA is not prepared to accept that the meat the Athlete ate was contaminated with clenbuterol. In its appeal brief, WADA seeks to highlight the extreme unlikelihood that any meat which the Athlete consumed on the relevant dates was contaminated with clenbuterol. According to WADA's position, this extreme unlikelihood originates from 1) an analysis of the supply chain of the meat in question; 2) the regulatory framework in Europe and Spain with respect to the use of clenbuterol to fatten livestock; and 3) reports at European, national and regional level, showing the results of the controls carried out on animals for various banned substances (including clenbuterol).

ba) As to the supply chain of the meat in question

The Submissions of the Parties

122. WADA and UCI refer to an executive report on the provenance of the meat purchased from Larrezabal butcher's on 20 July 2010 by Mr Cerrón (the "Executive Report") that confirms in all material respects the findings of the independent and official report of the Basque government (the "Traceability Report") conducted by a Health Inspector of the Public Health Department of the Basque Government. The material conclusions of these reports are the following:

- It follows from the price of the meat purchased by Mr Cerrón (EUR 32 per kg) that it could only have been a veal "solomillo". Not only is this consistent with the sworn declarations of both Mr Cerrón and Mr Olalla (the Astana team cook), who were witnesses for Mr. Contador; it was also confirmed by Mr Zabaleta (Managing Director of Larrezabal butcher's) to the Health Inspector and during the hearing;
- An analysis of the delivery notes and invoices of Larrezabal between the period commencing 15 June 2010 and ending 21 July 2010 reveals that, of the various suppliers, Carnicas Mallabia SL ("Mallabia") is the only one that sold solomillo of veal to Larrezabal during the relevant period. Mr Zabaleta confirmed that Mallabia is consistently the major supplier of veal to Larrezabal;

- By using the ear tags of the relevant calves sold to the Larrezabal butcher's by Mallabia, the Health Inspector was able to trace the animals back to the Felipe Rebollo slaughterhouse; the Felipe Rebollo slaughterhouse is situated in the region of Castilla y Léon;
- Using the internal reports of the Rebollo slaughterhouse and the "Health Control Registry Book", it was possible to trace the animals back to their ultimate source, the farmer known as "Lucio Carabias";
- All the animals belonging to the relevant batch of animals were subject to both *ante-mortem* and *post-mortem* evaluations, such information being recorded. *Ante-mortem* evaluations examine every animal for external symptoms or indications of administration of prohibited substances, *e.g.* unusual muscle configuration and/or behaviour. No samples of the relevant animals were taken in this instance as no suspicious behaviour was recorded.

123. WADA considers it therefore established that the relevant calf was reared and slaughtered in Spain.

124. The Athlete raised doubts regarding Lucio Carabias' farm being the ultimate source of the meat on the basis that the heaviest of the relevant animals weighed only 312 kg and therefore could not have produced a solomillo of 3.2 kg, as the animal would have to weigh in excess of 350 kg to produce a solomillo of this size.

125. In the opinion of Mr Zabaleta, sole shareholder and administrator of the Carnicerias y Charcuterías Larrezabal SL Company, who testified at the hearing, the solomillo of veal would ordinarily constitute circa 2% to 2.4% of its overall weight and this proportion could vary due to the natural variance in physical proportions of calf. It is understood that a solomillo is ordinarily taken from a half calf; in other words, the piece of solomillo purchased by Mr Cerrón is likely to have been approximately half of the solomillo of the entire calf. If the solomillo purchased by Mr Cerrón weighed 3.2 kg, then the solomillo from the entire calf would have weighed roughly 6.4 kg. Assuming that the solomillo was 2.2% (the average between 2% and 2.4%) of the total weight, then the animal concerned should have weighed circa 290 kg. It is also not unusual that parts of the contiguous "lomo" or the fat of the solomillo are sold as part of the solomillo itself, a practise which would mean that it is perfectly feasible that part of the 3.2 kg solomillo purchased by Mr Cerrón was actually comprised of lomo of solomillo fat. On that basis, it is perfectly possible that a calf of under 290 kg would produce two half veals each yielding a 3.2 kg piece of solomillo.

126. The conclusions of the Executive Report and the Traceability Report are also confirmed by the findings of the Winterman detective Report produced by WADA. This report also reaches the conclusion that no part of the supply chain of the veal in this case has suffered a non-compliant result in respect of clenbuterol.

127. Mr Contador has submitted that the brother of Mr Lucio Carabias (Mr Domingo Carabias) was implicated in 1996 and condemned in 2000 in a clenbuterol fattening case (the "1996 clenbuterol case"). In particular, it was stated that the two brothers co-managed a farming

company known as Hermanos Carabia Muñoz SL. The implication of these references is that the farmer who supplied the veal supposedly eaten by the Athlete should be tainted by association with his brother.

128. WADA invited the Panel to look at the 1996 clenbuterol case in its proper context and to not attribute any prejudicial weight to it within the context of this case: a) the 1996 clenbuterol case did not involve Lucio Carabias, only his brother; b) Domingo Carabias passed away in April 2010, *i.e.* before the time when the relevant dose of clenbuterol would have been given to the animal concerned which is a firm indication that the late Domingo Carabias had for some time not had any operational input into the farming business of his brother; c) the facts behind the 1996 clenbuterol case occurred some fifteen years ago and, importantly, prior to the implementation of the European Directives in Spain, which will be addressed in detail below - although the use of clenbuterol in Spain was prohibited in livestock farming prior to such implementation, it was sanctioned only through the imposition of administrative sanctions (*i.e.* a fine) and not at a criminal level through, for example, imprisonment; d) Lucio Carabias has also been subjected to a number of controls without a positive case of clenbuterol or any other beta-agonist. In particular, six random samples of his animals were taken by the veterinarians of the Felipe Rebollo slaughterhouse throughout 2009 and 2010.

129. In addition to WADA's arguments, the UCI puts forward that the circumstance that the brother of the farmer who supplied the animal was fined is of no avail because if any association with the brother of Mr Lucio Carabias Muñoz were to be made, it would have led to targeted and more frequent controls and this was not the case.

130. Mr Contador submitted that the animal in question could also have come from a different supplier. According to the Report revealed by Castellana Detectives, the origin of the meat is not certain and could in fact even have been supplied by another supplier. The uncertainty of the precise origin of the meat means that if it was not the product of an animal reared in Spain, there also exists the possibility that it could have been the product of a cow reared in South America. This uncertainty means that it is impossible to know for certain what controls were in place at the location of the animal's location of origin.

131. However, whether the meat came specifically from Mr Lucio Carabias Muñoz, or from an unknown location in Spain, or even South America, it remains that the risk that the animal from which the meat came was treated with clenbuterol is not only conceivable but is likely, first, because there is clenbuterol in the Athlete's system, second because the clenbuterol cannot plausibly have come from any other source, and third because of the history of clenbuterol abuse in each of the potential sources.

132. Even assuming the Appellants had conducted the necessary degree of investigation to confidently come to such a conclusion, they presume that because there is no history with clenbuterol, the meat is unlikely to have been contaminated. According to Mr Contador, that is a surprising conclusion of the Appellants; in order to try and demonstrate their allegation, the counsels for Mr Contador asked the following question and invited the Panel to consider it by analogy: Would the Appellants conclude that an athlete did not dope or had been the

victim of food supplements contamination on the basis that he passed 500 doping control tests before failing one? They do not.

133. The Athlete argues that the Appellants cannot plausibly suggest, as they appear to, that it is sufficient to ask those involved in the supply chain whether they have had any problems with clenbuterol to conclude that the meat is unlikely to have been contaminated. It is surprising that the Appellants would consider such a level of proof sufficient to come to such a conclusion. In any event, it is unlikely that a butcher or its distributors would know that meat handled by them had been contaminated with clenbuterol. A more appropriate approach by Winterman Detectives would have been to enquire as to the number of meat samples collected from the butcher and meat supplier which had been analysed for the presence of clenbuterol. However, no evidence is advanced that such spot checks for the presence of clenbuterol have ever taken place.

134. Mr Contador submits that given that the precise source of the meat remains unresolved, it cannot definitely be traced back to the Felipe Rebollo slaughterhouse, Lucio Carabias Muñoz or even necessarily to being Spanish meat. The alternative is that it came from a different meat distributor, a different slaughterhouse, a different farm and a different country in respect of which there is no information as to what controls, if any, were in place at the point of origin.

135. Mr Contador further submits that of course, any discussions in relation to the supply chain are irrelevant if the animal from which the meat originated was one of the 99.98% animals not tested in Spain in 2010. Moreover, Mr Contador asserts that the animal identified by the Traceability Report and the Appellants as the one most likely to have been the source of the meat did not undergo any testing before or after slaughter.

136. According to Mr Contador, the fact that Mr Domingo Carabias, the brother of Mr Lucio Carabias Muñoz and formerly joint director, had in fact previously been sanctioned for the illegal use of clenbuterol to fatten cattle is of utmost importance. Taken against a context in which the Athlete ate the meat and then tested positive for clenbuterol, this could mean one of two things: 1) the meat did indeed come from an animal reared by Mr Carabias Muñoz that was treated with clenbuterol; or 2) if it did not, the fact of the Carabias Muñoz family's previous history with clenbuterol abuse is not just an astonishing coincidence, but is in fact an indicator of the prevalence of clenbuterol abuse in the Spanish farming industry.

137. The RFEC basically supports the arguments put forward by Mr Contador, but provides Special Report number 14/2010, which has been developed by the European Court of Auditors concerning the Commission's Management of the System of Veterinary Checks for Meat Imports following the 2004 Hygiene Legislation Reforms. According to the RFEC, this report is more recent, specific, concrete and comprehensive than the reports presented by WADA, which refer to studies that are not updated.

Findings of the Panel

138. Based on the submissions, evidence and reports before it, the Panel finds it highly unlikely that the meat in question was imported from South America and considers it very likely that the supply chain of the relevant piece of meat can indeed be traced back to Lucio Carabias' farm, although the Panel cannot entirely rule out the possibility that the meat came from another unknown location in Spain. Furthermore, the Panel is convinced by the fact that veal is highly unlikely to have been imported from South America. Therefore, in light of all the evidences submitted to the Panel and the assessment of the evidences, the likelihood of the relevant piece of meat that was consumed by the Athlete being contaminated with clenbuterol has considerably diminished in the opinion of the Panel. The fact that clenbuterol was found in the Athlete's system can be an indication of the meat contamination theory being possible, it is also an indication of the theories of the Appellants being possible and is therefore no argument in itself. The plausibility of the clenbuterol having derived from another source will be assessed at a later stage in assessing the likelihood of the theories altogether. Finally, the Panel is not convinced by the argument that the brother of Mr Lucio Carabias was found guilty of illegally fattening his cattle with clenbuterol. The Panel noted that in 1996 it was not uncommon for farmers to use beta-agonists to fatten their cattle. However, as will be discussed below, the Panel is convinced that this practise diminished considerably after the implementation of the EU Regulations and the severe sanctions included in the Spanish criminal code in recent years. In conclusion, from the perspective of the supply chain, the Panel considers it unlikely (even if theoretically possible) that the meat came from another source than the farm of Mr Lucio Carabias.

bb) As to the regulatory framework

Submissions by the Parties

139. According to the Appellants, the European regulatory framework strictly forbids the administration of *inter alia* beta-agonists, including clenbuterol, to animals which meat is intended for human consumption, except for certain limited derogations for therapeutic or zootechnical purposes. The regulatory background in Spain has been summarised in more detail in an Expert Report prepared by Senn Ferrero, Associados Sports & Entertainment SLP. The Respondents waived their right to cross examine Mr Inigo de Lacalle who was supposed to testify on this expert opinion. According to this regulatory background, it is required that veterinarians under the control of the competent authorities are present at the slaughterhouses. Furthermore, the Spanish legislation provides for unannounced testing at all stages of the supply chain. Finally, EC Regulations 178/2002 and 1760/2000 require the implementation of systems that provide for the identification and registration of bovine animals and labelling of beef (and beef products). The aim and effect of these regulations is that one can locate and follow the trace, through all the stages of production, transformation and distribution, of a bovine animal which meat is intended for human consumption.

140. In the event of a breach of the prohibition, the sanctions in Spain are both wide-ranging and severe. Such conducts are considered criminal offenses, punished with imprisonment of up to four years, a fine, total disqualification from carrying out trade, industry, business or activity for a period ranging from three to ten years and indefinite closure of the relevant premises. At the hearing, Mr Javier Lopez confirmed these consequences. In addition to these mandatory regulations, Mr Lopez testified that slaughterhouses also carry out tests themselves to prevent being responsible for a positive test. If such a voluntary test would find a positive clenbuterol test, this would undoubtedly become known to the police. Next to the sanctions imposed by the authorities if a positive test is found, Mr Lopez testified at the hearing that the market itself would paralyse the responsible persons. Therefore, according to WADA, this regulatory backdrop is plainly a significant deterrent to the use of clenbuterol for the purpose of fattening livestock.

141. Mr Contador asserts in his answer that clenbuterol is a known contaminant in meat. The Athlete is supported by Prof. Vivian James who mentioned in his expert report that the contamination of meat products by clenbuterol is well-documented, as clenbuterol is a drug of choice for making the meat of cattle and other animals leaner. Mr Contador also gives numerous examples of illicit use of clenbuterol and other growth agents in Spain. Furthermore, in China and Mexico even though severe sanctions are imposed for illegal fattening of cattle, the problem in those countries is rampant. Since the level of clenbuterol testing in Spain is so low, it is not only plausible, but it is likely that dishonest farmers who wish to improve the size and leanness of their animal would resort to using clenbuterol, which is also mentioned by Dr Tomás Martín-Jiménez in his expert report. According to Mr Contador, the Castellana Detectives' report also proves that clenbuterol can be easily purchased on the Internet, without the need for official documents.

142. Therefore, Mr Contador concludes that it cannot be disputed that there exists, to this day, an illicit practice of clenbuterol use in stockbreeding countries around the world and that humans are exposed to the risk that they might consume meat from an animal treated with clenbuterol. The Appellants' argument that farmers are not using clenbuterol because it is banned in Spain is not grounded in reality.

Findings of the Panel

143. The Panel took note of the fact that the sanctions imposed on farmers using clenbuterol or other beta-agonists to fatten their cattle became much more severe after the implementation in Spain of the mandatory EU Regulations but finds that the existence of more severe sanctions today does not, in itself, disqualify the meat contamination theory. That said, the Panel finds that the statistics regarding the use of clenbuterol or beta-agonists in general corroborate the allegation of the Appellants that after the implementation of these Regulations, the illicit practise of illegally fattening cattle using clenbuterol became very rare in Spain. This fact is also corroborated by the figures and statistics contained in the report of Castellana Detectives submitted by Mr Contador and by the testimony of Mr Martin of Castellana Detectives who testified at the hearing.

bc) As to the statistics

Submissions by the Parties

144. WADA submitted that, based on the amount of clenbuterol present in the bodily sample of the Athlete, the meat consumed would have had to have been contaminated to a level significantly in excess of the minimum detection levels in the EU within the context of the National Residue Monitoring Plan (the "NRMP"), most probably around ten times the maximum permitted residue limit under EC Regulation EC 2391-2000. The estimation of the level of contamination of the meat is in the range of 1 ug/Kg according to the expert report of Dr Rabin. From this report it can also be derived that these levels of contamination mean that the relevant animal would have been slaughtered immediately or shortly after the administration of the last dose of clenbuterol. This is a pre-requisite to the meat contamination theory advanced by the Athlete which makes little sense in the eyes of WADA. On the one hand, the animal would not "benefit" from the substance to the fullest extent and on the other hand, it increases the risk for the farmer of being caught through the routine and random evaluations and inspections carried out at the slaughterhouse.

145. According to WADA, the *Commission Staff Working Document on the Implementation of National Residue Monitoring Plans in the Member States in 2008* (the "EU 2008 Report") is concrete evidence of the extreme rarity of the use of clenbuterol in livestock farming in Europe. Nearly three hundred thousand tests conducted on animals in 2008 across the Member States have not resulted in a single confirmed case of clenbuterol.

146. The EU 2008 Report provides even more detailed figures with respect to tests specifically carried out on bovines for the purpose of detecting beta-agonists. 23,966 targeted and suspect samples were conducted on bovines for beta-agonists in 2008 and not a single non-compliant sample involving clenbuterol has been finally confirmed; one case in Italy remains under investigation. Indeed, out of the 41,740 samples across all relevant animal types which were specifically analysed for beta-agonists, there were only two non-compliant samples, both in the Netherlands and neither involving clenbuterol.

147. WADA further point out that the samples recorded in the EU 2008 Report fall into two categories: "Targeted Samples" and "Suspect Samples". Whereas the latter category relates to samples taken as a direct result of previous non-compliant samples or the suspicion of illegal treatment at any stage of the food chain (and is therefore, it is submitted, much more likely to produce further non-compliant results than a random sampling methodology), even the former category (*i.e.* Targeted Samples) is aimed at the categories and types of animals most likely to produce non-compliant results.

148. Even 1) assuming that all of the samples recorded in the EU 2008 Report were random and that the clenbuterol case in Italy was confirmed (as opposed to being merely a suspect sample); and 2) taking only the statistics specifically relating to beta-agonists in bovines, the necessary conclusion is that out of 23,966 samples, only one contained clenbuterol. Therefore, based on these figures, the probability that a given bovine in Europe would be contaminated

with clenbuterol at a level capable of being detected pursuant to EC Regulation 2391-2000 would be 0.0042%.

149. This percentage would have to be further reduced to take into account the fact that the samples recorded in the EU 2008 Report (both the Suspect and the Targeted Samples) are not random but pre-selected to be more likely to produce a non-compliant result. Indeed, one should also consider that the presence of clenbuterol within livestock at a farm would not necessarily result in contaminated meat after the slaughter of such livestock (*i.e.* if the animals are slaughtered after the clenbuterol has exited their system); the "suspect sample" case of clenbuterol in Italy was in fact taken at a farm and based therefore on living animals. The percentage of contaminated meat available at retail outlets (*e.g.* butchers) would therefore be smaller still. The actual percentage possibility of a piece of bovine meat bought at a retail outlet in Europe being contaminated with clenbuterol is therefore according to WADA's submissions and based on the most recently published European statistics, substantially less than the level mentioned above.

150. An analysis of equivalent reports (to the EU 2008 Report) from previous years reveals that Spain has had just one positive case of clenbuterol since (and including) 2004, such case occurring in 2006. A summary analysis of these reports from previous years also reveals a marked decreasing trend in terms of beta-agonist contamination in targeted bovine samples. The following percentages of such samples were positive for any beta-agonist (as opposed to just clenbuterol): 2005: 0,08%, 2006: 0,06%, 2007: 0,01%, 2008: less than 0,009%. It is therefore logical to assume that this clear trend continued in 2009 and 2010.

151. According to WADA, the above statistics alone are sufficient to conclude that the possibility that a given piece of meat bought in Europe is contaminated with clenbuterol is vanishingly thin.

152. The statistics at regional level in Spain confirm that clenbuterol contamination is extremely unlikely in the relevant regions of the Basque Country and Castilla y Léon. In Castilla y Léon, official figures of the Health Ministry of the "Junta de Castilla y Léon" reveal that between 2006 and 2010, 7,742 bovine samples were taken specifically to detect beta-agonists and not a single positive of clenbuterol has occurred during this period. Between 2006 and 2009 (inclusive), 396 bovine samples were analysed for beta-agonists, again without a single positive clenbuterol finding.

153. WADA reminded the Panel that it is of course not able (nor required) to prove (statistically or otherwise) that there is not a single piece of contaminated meat in Europe, Spain or the Basque Country.

154. WADA is supported in its conclusions by Dr Martin-Pliego López, as he concludes that the probability of a bovine animal being contaminated with clenbuterol has been zero or almost zero in Spain during the last few years.

155. In his written submissions, Mr Contador contends that the arguments used by WADA are erroneous and misguided. The EU 2008 Report contains severe limitations and the dangers of relying on it are outlined in detail in a report prepared by Prof. Sheila Bird:

a) The *"analysis at EU-level tacitly assumes – but does not evidence – that the member states' random sampling plans are all of the requisite standard and are comparably robust";*

b) The EU's testing regime is based on low-frequency random testing of bovines; she explains that *"Low-frequency tests, unlike universal testing, have low deterrence-value and they are more readily avoided, or results falsifiable";*

c) The EU implements such a low minimum random sampling rate of bovines to be tested for clenbuterol per member state (only 125 need be clenbuterol tested per 1 million slaughtered bovines) that its random surveillance *"can only have low deterrence value"*; and

d) The EU 2008 Report fails *"properly to report how many random bovine samples were actually subject to clenbuterol testing"*. This is a fundamental figure which has not been reported.

156. The cases mentioned by Mr Contador regarding the illicit use of clenbuterol and other growth agents in Spain show that it remains a significant problem to this day. Yet, the figures relating to Spain reported in the EU 2008 Report clearly do not reflect that, which means either that the reporting of positive results is inaccurate or the level of testing is inadequate, or both.

157. The official figures from the Basque Country and Castilla y Léon also have severe limitations according to Prof. Bird:

a) The *"meagre"* number of 353 samples tested for clenbuterol at the Felipe Rebollo slaughterhouse(s) between 2006 and 2010, cannot rule out a clenbuterol contamination rate as high as 1 out of 100 slaughtered veal calves;

b) "It is prudent to rely on the combined evidence from random and on-suspicion testing" because *"the possibility of misdirected on-suspicion testing cannot, of course, be ruled out"*.

c) Only 213 bovines were randomly tested for clenbuterol between 2006 and 2009 in the Basque Country. Again, Prof. Bird concludes that such a low number of tests is insufficient to rule out a clenbuterol contamination rate as high as 1 per 100 bovines; and

d) The level of confidence with which one might claim a rate of abuse of clenbuterol of less than 1 in 1,000 in the Basque Country and Castille y Léon is *"statistically low"*.

158. WADA refers to a letter from the Basque authorities dated 12 April 2011 in which it confirms that there was no positive case of clenbuterol in 2010 in the Basque Country. However, Castellana Detectives uncovered evidence that there was in fact a positive test for clenbuterol in the Basque Region in late 2009 that was never reported in the official statistics, nor acknowledged by the Basque authorities in their letter to WADA. Such "official" statistics are therefore reliable only to the extent that the reporting is accurate and true. Here, it was not.

159. The statistics presented by WADA, by way of the EU 2008 Report and Dr Lopez' report, only take account of the meat from cattle reared in Europe and not the meat of cattle reared

in South America. The statistics, to the extent that they offer comfort to WADA, therefore do so in relation to meat from cattle reared in the EU. *"EU's random testing regime at slaughterhouses does not cover imported meat"*. Meat purchased in Spain may have been reared elsewhere in the EU or sourced outside of the EU. Its importation into the EU rests on EU-approval of the source nation's surveillance regime. However, according to Prof. Bird, *"the EU's own surveillance regime leaves much to be desired"*.

160. As to WADA's contention that the *"likelihood to eat meat contaminated in Europe is almost close to zero"*, Prof. Bird comments *"This is wrong. In view of the above, no such guarantee applies at the level of member-state, let alone for regions within member-states"*.

161. Mr Contador considers it therefore evident that the statistics on which the Appellants rely have little evidentiary value and do nothing to diminish the Athlete's case that clenbuterol originated from contaminated meat.

162. In the second round of submissions by WADA, Dr Javier Martin-Pliego López addressed a response to the expert report of Prof. Bird. The main critique can be summarised as follows:

a) NRMP does not use random sampling, but targeted sampling;

b) Taken in isolation, the *ex ante* probability of a test on bovine meat in Castilla y Léon producing a positive for clenbuterol is 0.0065% or 1 in 15,485;

c) Prof. Bird identifies a required theoretical minimum percentage of tests for beta-agonists mandatorily imposed by EU Regulations. However, she seems to ignore that the actual number of beta-agonist tests on bovines is seven times higher than the theoretical minimum. The minimum number is therefore strictly irrelevant;

d) According to Prof. Bird, only 1 in 20 beta-agonist tests would be capable of detecting clenbuterol. However, even if such a minimum threshold did exist for clenbuterol *quod non*, laboratories would have no reason to exclude clenbuterol from the results of the multi-residue testing, which would detect clenbuterol at no extra cost;

e) Without any clear justification all tests in the Basque region which were not conducted on slaughterhouses are discarded.

163. In Mr Contador's second submission, Prof. Bird notes that the majority of the criticism of Dr López is based on the constitution of the right denominator. WADA's interpretation of what constitutes a relevant denominator is much wider:

"In essence, WADA has pooled together data across age-groups, sample-sources and Member States. […] Pooling across sample-sources should be avoided and so I stand by my decisions because denominators should not be artificially inflated by non-slaughterhouse samples that pertain to potentially different slaughter years or different countries, not by slaughterhouse samples from targeted surveillance in Member States other than Spain".

164. In summary, according to Prof. Bird, the more defined the numerator and denominator, the more accurate the inference that may be drawn from the rates calculated (provided the sample population is large enough). WADA's decision to pool together large amounts of data,

without regard to the specific category under examination serves only to artificially inflate its denominators, which in turn WADA utilises to produce self-serving, sensationalist statistics.

Findings of the Panel

165. In respect of the above, the Panel notes that the Appellants do not argue that the meat contamination theory is totally impossible *per se*. The Appellants merely tried to convince the Panel of the very low probability of this theory having occurred and in doing so arguing that Mr Contador did not establish to the relevant standard of proof, i.e. on a balance of probabilities, how the prohibited substance entered his system.

166. As a preliminary matter, the Panel notes the contradictory needs of statistics in general. On the one hand, the denominator must be made as accurate as possible, which requires being selective with the data, while on the other hand, in seeking that accuracy, the denominator can become so low that no safe statistical conclusions can be drawn from the figures.

167. The Panel notes that regardless of whether a low denominator is used in tests conducted in the Felipe Rebollo slaughterhouse, or whether a high denominator is used in tests conducted in the entire EU, in all the statistics presented to the Panel, the amount of clenbuterol positive results is very low. As a follow-up for the 'limited' tests at the Felipe Rebollo slaughterhouse, the experts agreed that it would be appropriate to up the scale to the relevant region, then the country and finally the EU.

168. The Panel further notes that Prof. Bird's figures concerning the Felipe Rebollo slaughterhouse are based on an assessment of a number of tests in which zero positive results were found, but in the denominator causes that no "safe" conclusions can be drawn. Therefore, the Panel considers that 1/100 is an extreme figure; if an average chance on a positive result is calculated, this figure would be much lower than 1/100.

169. The Panel considers the tests conducted on bovines in the Felipe Rebollo slaughterhouse highly important. These statistics exclude most of the irrelevant data as the results only include tests of bovines at the relevant slaughterhouse in the relevant year. The results show that this slaughterhouse did not have any clenbuterol positive tests.

170. Furthermore, even if the Panel ups the scale to an entire region, to Spain or even to all the Member States of the European Union, the statistical chance of a cow being contaminated with clenbuterol remains very low.

171. In addition, independently from the various statistics invoked by both parties, the Panel finds it unlikely that in practice a farmer would slaughter any illegally fattened animals shortly after administering the product intended to fatten them.

172. For all the above reasons, the Panel agrees with the submissions of UCI and WADA that the possibility of a piece of meat being contaminated in the EU cannot entirely be ruled out, but that the probability of this occurring is very low.

c) The pharmacokinetics

173. The Panel notes that, although initially disputed, at the hearing, the parties informed the Panel that the UCI and WADA did no longer dispute the pharmacokinetics of the meat contamination theory, *i.e.* the Appellants accepted that a piece of meat contaminated with clenbuterol could cause an adverse analytical finding.

174. The Panel is therefore accepts that a piece of meat being contaminated with clenbuterol could cause an adverse analytical finding of 50 pg/mL of clenbuterol in Mr Contador's bodily sample.

d) Panel's conclusions regarding the meat contamination theory

175. The Panel is satisfied that Mr Contador ate meat at the relevant time and that if the meat that he ate was contaminated with clenbuterol it is possible that this caused the presence of 50 pg/mL clenbuterol in a urine doping sample.

176. In that relation, on the basis of all the evidence adduced, the Panel considers it highly likely that the meat came from a calf reared in Spain and very likely that the relevant piece of meat came from the farming company Hermanos Carabia Muñoz SL.

177. As the parties agreed that it is possible that a contaminated piece of meat could cause an adverse analytical finding of 50 pg/mL of clenbuterol, the only remaining element (the "missing link") is whether that specific piece of meat was contaminated with clenbuterol. The Panel is not prepared to conclude from a mere possibility that the meat could have been contaminated that an actual contamination occurred.

178. More specifically, the Panel finds that there are no established facts that would elevate the possibility of meat contamination to an event that could have occurred on a balance of probabilities. Unlike certain other countries, notably outside Europe, Spain is not known to have a contamination problem with clenbuterol in meat. Furthermore, no other cases of athletes having tested positive to clenbuterol allegedly in connection with the consumption of Spanish meat are known. On the contrary, the evidence before this Panel demonstrates that the scenario alleged by Respondents is no more than a remote possibility.

179. In reaching this conclusion the Panel has taken into account the very low likelihood of a piece of meat from a calf reared on a Spanish farm being contaminated with clenbuterol as well as the fact that the slaughter of the animal would have had to have occurred shortly after the administration of clenbuterol in order to have the alleged effect. The Panel also notes that regardless of whether a low denominator is used in a test conducted in the Felipe Rebollo slaughterhouse, or whether a high denominator is used in tests conducted in the entire EU, in all the statistics presented to the Panel by the parties, the amount of clenbuterol-positive results is either very low or practically non-existent.

180. The Panel therefore considers that although the meat contamination scenario is a possible explanation for the presence of clenbuterol in Mr Contador's Sample, in light of all the evidence adduced - and as explained above, it is very unlikely to have occurred.

181. At this stage, it is noteworthy reminding (as already explained above in § 109) that if the Respondents were able to show that the contaminated meat theory is the only possible one (or the most likely scenario to have occurred), this additional fact could elevate the scenario from a possible one to a likely one meaning that the percentage of the chance that it indeed occurred would be over the threshold of 50% (which is the required standard under the regime of the balance of probability). Being the single possible scenario (or the most likely one among different scenarios) carries evidential weight in the assessment of the balance of probabilities. Therefore, in this case, the assessment must be done also in reference and in comparison to the other scenarios put forward by the Appellants. If the Panel were to conclude that the other two theories are impossible or less likely, then the Panel would be prepared to consider the meat contamination scenario as sufficient proof. However, as already expressed above (§ 111) the burden of proof that the meat contamination scenario is more likely than other (possible) scenarios remains always on the shoulders of the Athlete and the Standard under which all the theories will be assessed is the balance of probabilities.

E. The Blood Transfusion Scenario

182. The Appellants submit that it is more likely that the adverse analytical finding of Mr Contador was caused by the result of the application of doping methods than by meat contamination.

183. The scenario put forward by the Appellants in this regard is the one of blood transfusion (the "blood transfusion scenario").

184. In this relation it is alleged that Mr Contador undertook a transfusion of red blood cells on 20 July 2011 and then - in order to preserve a natural blood profile and mask the use of such transfusion, which can be detected through the Athlete's Biological Passport (the "ABP") - the next day (21 July 2010) injected plasma (to hide the variation of haemoglobin values) and erythropoiesis stimulation (to hide the variation of reticulocytes) into his system. According to the Appellants, it is the transfusion of plasma of 21 July 2010 which would have contaminated the Sample with clenbuterol, resulting in the adverse analytical finding. The Appellant base their conclusions on the following evidence: the environment of the Athlete (a), the Athlete's blood parameters (b), and the traces of phthalates (c). The Respondents contest the conclusions and the evidence of the Appellants.

a) The alleged tainted environment of the Athlete

Submissions by the Parties

185. WADA begins its argumentation by indicating that it is not unusual for an athlete to take clenbuterol in order to enhance his/her performances.

186. Between 2008 and 2010 alone, almost 250 clenbuterol adverse analytical findings have been reported, of which 18 in cycling. Compared to the figures related to contaminated meat with clenbuterol, these statistics show that it is more likely for an athlete to test positive for clenbuterol for doping reasons rather than as the result of ingestion of contaminated meat.

187. Mr Contador stated in his defence, among others, the following:

"I have never taken doping substances in my life. And not only have I not taken doping substances, but I have always been surrounded by people (cyclists, doctors, trainers, etc.) who categorically reject the use of doping substances".

188. WADA disagrees with this statement.

189. In its appeal brief WADA presented a list of 12 former or current team-mates of Mr Contador who have been banned for doping and states that criminal investigations are pending against the Astana Team and the Athlete's former team manager, Mr Manolo Saiz, while in the "Puerto" criminal investigations, initials corresponding to those of Mr Contador were found in certain handwritten documents of Dr Fuentes and Mr Jörg Jaksche testified accordingly in his own doping case. Finally, Mr Contador's current team manager, Mr Bjarne Riis admitted to having used performance-enhancing drugs during his career.

190. WADA does not argue that these alleged facts are sufficient in themselves to establish that Mr Contador should be sanctioned for an anti-doping rule violation. However, according to WADA, the tainted environment in which the Athlete lives, enhances the likelihood that the source of the adverse analytical finding is doping rather than a contaminated piece of meat. Furthermore, these facts contradict the statement of the Athlete who misleadingly claims that he has always been surrounded by *"people (cyclists, doctors, trainers, etc.) who categorically reject the use of doping substances"*. The statement of Mr Contador, claiming that he does not know the highly controversial Dr Fuentes is also undermined by the admissions of his former team-mate Mr Jörg Jaksche.

191. Mr Contador submits that the Appellants' attempt to fashion his guilt by association is not only unacceptable but also carries no evidentiary weight. Prof. Hans Michael Riemer concludes in his expert report that reliance on such evidence would be contrary to Swiss law. *"One could argue that relying on the fact that former teammates committed a doping offence in the past to rebut the contention that a prohibited substance was ingested by meat contamination would amount to a finding of guilt by association. Moreover, taking into account behaviours or conducts for which the accused person is not responsible is intrinsically in violation of the requirement of due process because the accused person is deprived of his or her right to defence, given that he or she has no influence or control over the relevant facts. […] Relying*

on the fact that doping is allegedly widespread in cycling at any stage of the legal reasoning leading to the imposition of a sanction would not only be arbitrary as such, but also run against the principle nulla poena sine lege certa".

Findings of the Panel

192. The Panel considers that the tainted environment of the Athlete should carry no evidentiary weight in assessing whether Mr Contador underwent a blood transfusion or not.

193. No person in the "environment" of Mr Contador saw or alleged that Mr Contador underwent a blood transfusion. No person submitted that Mr Contador knew of their wrongdoings or that they acted in part or entirely in concert with each other. This is all the more surprising since the blood transfusion scenario implies that at least a group of people must have been involved (Athlete, donor of plasma, somebody harvesting the plasma, somebody storing the plasma and blood bags, somebody re-injecting the plasma and the blood, etc).

194. Being in "bad company" is no more or less of an indication of illicit behaviour for an athlete than family ties are between cattle farmers (see supra § 138). In saying that, the Panel also notes that being in "good company" is no indication whatsoever that an Athlete is not involved in doping. The same applies, in principle, to the evidentiary value of personal declarations by an athlete alleging that he has never doped before.

195. Finally, the Panel does not ignore the fact that Mr Contador himself used a similar argument in putting forward several investigations of the Spanish police regarding meat contamination cases in order to make it more likely that the farm of Mr Lucio Carabias illegally fattened its cattle. However, in view of its above-developed reasoning concerning the meat contamination theory, the Panel did not give any specific evidentiary weight to the said investigations either, and finds that the actions of certain persons, or certain general circumstances, should not in principle affect the way the evidence concerning a specific person or case is taken into consideration and evaluated. The same standard of assessment is therefore applied to the arguments of both sides in this dispute.

b) The Athlete's blood parameters

Submissions by the Parties

196. WADA submits that following the introduction of the ABP in cycling, professional cyclists have admitted to masking practices that hide the use of blood transfusions.

197. In that relation, it submits that the variation of blood parameters can be manipulated in order to obtain a blood profile consistent with natural values. Blood transfusions can be detected notably because they lead to an increase of haemoglobin values. The spike in haemoglobin values can however be artificially diminished by an addition of plasma to dilute blood. After a

transfusion, a diminution of the reticulocytes values is observed. In order to mask this variation, athletes use microdose injections of an erythropoiesis stimulating agent.

198. According to WADA, Mr Contador chose to rebut the accusation of doping in the proceedings before the CNCDD of the RFEC by referring to his blood parameters. These parameters would supposedly illustrate that his blood values are consistent with a natural profile. In the course of the first instance proceedings, Mr Contador filed two reports related to his biological passport and haematological profile during the 2009 and 2010 seasons.

199. While Mr Contador's experts focused on the blood parameters available during the 2009 and 2010 seasons, Dr Michael Ashenden analysed the values of the samples collected during the 2010 Tour de France in a much broader perspective, taking into account 55 blood results from 2005 through 2010. Dr Ashenden found on such basis that Mr Contador's reticulocyte values collected during the 2010 Tour de France were atypical because:

a) they are higher than his natural (out of competition) reticulocyte values, while they should normally be lower in competition;

b) they are also significantly higher than the values measured during his previous victories at the Tour de France (2007 and 2009), the 2008 Vuelta and the 2008 Giro, while they should be comparable.

200. With respect to the haemoglobin concentration, Dr Ashenden concludes that the 2010 Tour de France values are not normal for Mr Contador compared to the values collected during the seasons 2007 and 2008. They are higher than normal, like the reticulocyte values. However, Mr Contador's haematological values during the 2010 Tour de France do not, in themselves, provide indications of transfusion or manipulation. In that respect, Dr Ashenden agrees with Mr Contador's expert.

201. WADA argues that, in contradiction to what the Athlete is trying to suggest, the analysis of his blood values certainly does not support the contention that he would not manipulate his blood, but, on the contrary, when taken in an overall context, include variations that are difficult to reconcile with physiological variations and provide indications which could be consistent with blood doping.

202. Regarding the blood parameters, Mr Contador points out as a preliminary matter that this is not an ABP case and that the Appellants cannot be permitted to argue such a case. Mr Contador submits that attempting to do so is an abuse of process; the only subject matter of the appeal being how clenbuterol entered his system between the evening of 20 July 2010 and 21 July 2010. Any allegations and claims relating to other alleged anti-doping violations should have been made on their own merit and could only have been the object of different proceedings.

203. The Athlete points out that WADA itself concedes in § 129 of its appeal brief that *"Contador's haematological values during the 2010 Tour de France do not evidence per se traces of transfusion or manipulation"*. In that respect, the Athlete's ABP expert, Mr Paul Scott, comes to the same conclusion in his expert report.

204. This concession alone should already have been sufficient to persuade the Appellants not to pursue the blood transfusion theory any further.

205. The Appellants' fixation with the theory has compelled the Athlete to apportion a disproportionate amount of time and resource to addressing the observations made by Dr Ashenden in his report, when in reality they have nothing to do with the subject matter of the present case.

206. In his expert report, as well as during his testimony at the hearing, Mr Scott agrees with Dr Ashenden that if the speculative blood transfusion scenario had happened, it would have boosted the total red blood cells in the Athlete's blood while leaving his haematological parameters largely unchanged, or at least keeping any changes well inside the "cut-offs" for the ABP.

207. However, Mr Scott does not agree with Dr Ashenden's assessment that the Athlete's 2010 Tour de France haemoglobin concentration or reticulocyte percentages are atypical or suspicious; Mr Scott finds them decidedly not atypical.

208. Mr Scott agrees that on the basis of blood values alone, the blood transfusion theory described by Dr Ashenden cannot be ruled out as impossible. However, other data make this scenario implausible.

209. Mr Scott's main argument in his expert report is that there is no such thing as "natural" reticulocyte percentages. Instead, that "natural" value must be expressed with a reasonable range bracket and that range bracket must include experimental error and expected physiological variation. This range bracket is accounted for in setting thresholds in ABP and 3G models, but is not accounted for in an analysis of the form Dr Ashenden conducted with regard to Mr Contador's 2010 Tour de France samples. To determine if Mr Contador's 2010 Tour de France samples are atypical with regard to reticulocyte percentages, the use of ABP or 3G analysis is necessary in order that the appropriate range bracket is taken into account.

210. During the hearing, in the framework of the experts' conference, Dr. Ashenden and Mr Scott discussed the method of calculation of these natural values. Mr Scott notes that during the February 2006 tests run in the Lausanne WADA-accredited Laboratory, six collections were taken and not three as alleged by Dr Ashenden. Calculating Mr Contador's natural value based on these six collections does not lead to a significant difference compared to the data presented by Dr Ashenden based on three collections. However, without adequate explanation as to why some values were excluded and others were not, Mr Scott feels it is only appropriate to use the full set of data available.

211. Another argument put forward by Mr Scott is that Dr Ashenden refers to two papers that indicate that the expected reticulocyte percentage values should be lower than those of an athlete's out-of-competition values. None of the papers makes any attempt to evaluate a "natural" value for an athlete's reticulocytes nor makes any claims regarding such a "natural"

value. Furthermore, those papers are only studies and there is no controlled experiment to test a hypothesis.

212. Based among others on this expert report of Mr. Scott, the Athlete concludes that, as acknowledged by the Appellants, his blood profile does not evidence any transfusion or blood manipulation. The Athlete concludes that this point does not therefore merit any further examination.

213. During the hearing, the discussion between Dr Ashenden and Mr Scott mainly focussed on how the Athlete's "natural" blood values are to be established. If the normal procedure is followed and the comparison is made against the whole range of data in Mr Contador's ABP, no abnormal results are found. However, if Mr Contador's blood values during the Grand Tours between 2007 and 2010 are taken separately, then the values during the 2010 Tour de France are "unusual".

214. In his closing submissions, the UCI noted that the Athlete's blood values may well be within the limits as argued by Mr Scott. However, the UCI added that this is not surprising because it is the purpose of manipulation.

Findings of the Panel

215. After considering the positions of all the parties and the expert reports of Dr Ashenden and Mr Scott, the Panel comes to the conclusion that the Athlete's blood parameters cannot establish a blood transfusion. The Panel understands that the Appellants do not want to prove *per se* that the Athlete underwent a blood transfusion but only argue that a blood transfusion is more likely to have caused the presence of clenbuterol than the meat contamination scenario.

216. It is noted that Dr Ashenden sliced the results of former blood values of Mr Contador, *i.e.* he used the samples taken during or shortly before or after the Grand Tours. The Panel is not convinced that the comparison conducted by Dr Ashenden is a sufficiently secure method of establishing inconsistencies in Mr Contador's ABP.

217. More specifically, after considering the positions of all the parties and the expert reports of Dr Ashenden and Mr Scott, the Panel finds that the inconsistencies that Dr Ashenden sees in Mr Contador's ABP are not conclusive and are deducted from too many uncertain blood parameters and comparisons, making them too speculative and insufficiently secure to rely on as convincing supporting evidence that an athlete underwent a blood transfusion.

218. However, even if no inconsistencies in the Athlete's ABP were established, in the opinion of the Panel, this does not make the blood transfusion scenario impossible, bearing in mind, among others, as the UCI rightly mentioned, that preventing inconsistencies in one's ABP is precisely the purpose of transfusing plasma. This leads the Panel to the examination of the issue of the traces of phthalates.

c) Traces of phthalates

219. Phthalates are additives that are widely used in plastics and other materials, primarily to make them more flexible. They are used in industry as well as in medical and consumer products.

220. Different kinds of phthalates (also referred to as plasticisers or DEHP) are detected by laboratories in the anti-doping field, including: Mono-(2ethyl-5-hydroxyhexyl) phthalates (5OH-MEHP), Mono-(2ethyl-5-oxohexyl) phthalates (5OXO-MEHP) and Mono-(2-ethylexyl) phthalates (MEHP). An elevated concentration of phthalates after blood transfusion has been shown in several recent studies. Some blood bags used for transfusion contain plasticizers, which can easily migrate into the blood.

221. In relation to the samples collected from the Mr Contador the following findings are undisputed:

222. The day before Mr Contador tested positive to clenbuterol, *i.e.* on 20 July 2010, he provided another sample (n°2512049). This sample was tested by the Cologne Laboratory, which detected that it contained an extremely high concentration of phthalates. The concentration of 5OH-MEHP reported for the Athlete's Sample was 478.5 ng/mL; for 5OXO-MEHP, the concentration was 208.6 ng/mL. These figures had been corrected and were based on a specific gravity of 1.020. Without this correction, the concentrations of 5OH-MEHP and of 5OXO-MEHP were respectively 741.7 ng/mL and 323.3 ng/mL (with the effective specific gravity of 1.031 measured in the sample of 20 July 2010). These two concentrations are extremely high; one of them being more than twice as high as the maximum concentration detected by the Barcelona Laboratory in a study.

223. The peak of phthalates which appears on 20 July 2010 is consistent with the data obtained after a blood transfusion.

224. The Appellants submitted a letter to the Panel from Dr Hans Geyer, Deputy Head of the Cologne Laboratory. According thereto, the Cologne Laboratory analysed in 2010 and 2011 approximately 11,000 doping control samples. Out of this number, only 5 samples showed abnormally high concentrations of phthalates from sports where it is assumed that blood transfusions have no beneficial effect.

225. Furthermore, the Appellants submitted a recent study by the Barcelona WADA-accredited Laboratory showing that the average concentration for 5OH-MEHP is 36.6 ng/mL and the maximum concentration is 256.5 ng/mL. For 5OXO-MEHP, the average is 27.9 ng/mL and the maximum is 198.8 ng/mL.

226. According to WADA, the result obtained from the Athlete is not conclusive in itself but is an important indication of the occurrence of a blood transfusion when seen in the light of the positive test for clenbuterol in a different sample the next day, at a moment when the Tour de France was reaching a climax in difficulty, the riders were tired and the lead of Mr. Contador was very tight, *i.e.* such peak is much more likely to be the consequence of blood manipulation

than of an extraordinary sequence of two unrelated atypical and fortuitous events. The Appellants submit that it is conceivable that plasma, which could come from a donor, would have been contaminated with a sufficiently high quantity of clenbuterol to trigger the positive test.

227. The plausibility of this theory has been confirmed by Dr Ashenden and Dr Geyer.

228. According to Dr Ashenden, in order for this theory to be plausible it is necessary that 1) separate bags of red blood cells and plasma were used; 2) a pouch of plasma was contaminated with clenbuterol; and 3) an ability to boost the reticulocyte percentages during the event. After having assessed all these elements, Dr Ashenden came to the conclusion that *"Based on unequivocal evidence that professional cyclists harvest and store separate bags of red cells and plasma, there is a plausible scenario whereby the clenbuterol found in the sample collected on July 21st 2010 originated from a bag of contaminated plasma"*.

229. According to Dr Geyer, the Athlete's sample of 20 July 2010 shows much higher concentrations of DEHP metabolites than all other samples of the Athlete collected during the Tour de France between 5 and 25 July 2010. Additionally, the concentrations of DEHP metabolites 50H-MEHP and 5OXO-MEHP of this sample exceed the upper reference limits (99.9% confidence) both of a control group (n=100) and an athlete group (n=468). Therefore, Dr Geyer considers that *"these data are consistent with data obtained after blood transfusion"*.

230. Additionally, Dr Geyer mentions that: *"According to our knowledge all actually approved blood bags are flexible polyvinyl chloride (PVC) products. The most commonly used plasticiser in flexible PVC is di-(2-ethylhexyl) phthalate (DEHP)"*.

231. During the hearing, the UCI added how extremely rare plasticiser peaks are in doping samples. Such statement was confirmed by Dr Ashenden and Mr Scott at the hearing.

232. Mr Contador disputes that the adverse analytical finding could have been caused by a blood transfusion, and invokes contrary evidence basing himself in particular on the results of a polygraph examination he underwent, on other scientific explanations for the presence of phthalates and on expert opinions and scientific factors demonstrating that the blood transfusion theory is pharmacologically and toxicologically impossible, each of which will now be examined in turn.

ca) The Polygraph Examination

233. In order to corroborate his assertion that he did not undergo a blood transfusion of any kind at the relevant time, the Athlete voluntarily underwent a polygraph examination on 3 May 2011. In doing so, Mr Contador was asked and answered two series of question as follows:

"- Did you undergo a transfusion on July 20 or July 21, 2010? (No)

- On July 20 or July 21, 2010 did you receive a transfusion? (No)

- *Did you submit to a transfusion on July 20 or July 21, 2010? (No)";*

and*;*

"- Did you knowingly ingest clenbuterol on July 20 or July 21, 2010? (No)

- *Between July 20 and July 21, 2010 did you deliberately ingest clenbuterol? (No)*
- *Were you aware that clenbuterol was entering your body, in any way, on July 20 or July 21, 2010? (No)".*

234. Dr Louis Rovner concluded in his expert report, and confirmed during the hearing, that *"it is my professional opinion that Alberto Contador was telling the truth when he answered the relevant questions above, and, as such, that he did not undergo a transfusion of blood, plasma, or any other substance on either July 20, 2010 or July 21, 2010".*

235. The polygraph results and video of the polygraph were sent for independent review to Dr Palmatier, polygraph credibility consultant, who concluded in his expert report, and confirmed during the hearing by videoconference, that: *"After a complete review of all of the materials supplied, and both a semi-objective and objective assessment of the recorded physiological data, I concur with Dr Rovner's findings that Alberto Contador was truthful when he responded to the relevant questions asked in each of his […] examinations".*

236. The Appellants did not dispute the admissibility of the polygraph examination itself, but referred to CAS 2008/A/1515, § 119 where it is stipulated that: *"[…] A polygraph test is inadmissible as per se evidence under Swiss law. Therefore, the CAS Panel may take into consideration the declarations […] as mere personal statements, with no additional evidentiary value whatsoever given by the circumstance that they were rendered during a lie detector test (TAS 99/A/246, par. 4.5; CAS 96/156, par. 14.1.1)".*

237. During the hearing, Mr Contador drew the attention of the Panel to Article 23 UCI ADR and the corresponding Article 3.2 of the WADC providing that: *"Facts related to anti-doping rule violations may be established by any reliable means, including admissions".*

238. Mr Contador also underlined that the admissibility of a polygraph test in arbitration procedures is far less stringent as in courts. As Mr Contador considers the polygraph examination to be a reliable method, he argues that the evidence should be admitted by the Panel. Moreover, according to the Athlete, the polygraph examination in CAS 2008/A/1515 was not admissible for another reason: the two CAS awards referred to in the CAS 2008/A/1515 case are irrelevant as those awards were rendered before the entering into force of the WADC.

239. The Panel notes that the Appellants did not oppose the admissibility of the polygraph examination, but only argued that it has no more evidentiary weight than a personal statement of the Athlete.

240. Based on its powers to administrate proof under Art. 184 PILA and given the Appellants acceptance that the polygraph examination is admissible as evidence per se, the Panel

considers that the results of the polygraph examination undergone by Mr Contador in this case are admissible.

241. In respect to the probative value of the polygraph test the Panel notes that the examination was conducted by Dr Louis Rovner, a highly experienced polygraph examiner who alleges to be 95% accurate and that the remaining 5% were false positive results. The Panel also notes that the polygraph examination was reviewed by Dr Palmatier, an experienced polygraph credibility consultant who came to the conclusion that *"the examinations were professionally conducted and in compliance with professional associations and organizational standards. More important, the examinations were conducted in a manner supported by empirical research"*.

242. In light of the foregoing, the Panel takes good note of the fact that the results of the polygraph corroborate Mr Contador's own assertions, the credibility of which must nonetheless be verified in light of all the other elements of proof adduced. In other words, the Panel considers that the results of the polygraph add some force to M Contador's declaration of innocence but do not, by nature, trump other elements of evidence.

243. In coming to its conclusions, the Panel took note of the former CAS awards regarding polygraph examinations. However, as already mentioned, two of these awards (TAS 99/A/246 and 96/156) were rendered before the entering into force of the WADC. The third award (CAS 2008/A/1515) simply refers to these two previous cases with no specific reference to the applicable procedural provisions for the admissibility of evidence and to article 3.2 of the WADC. This jurisprudence does not prevent the admissibility of the polygraph examination in the case at hand.

cb) The scientific possibility

244. The Athlete asserts that the elevated levels of DEHP can be caused by a range of different circumstances.

245. In his expert report Dr Holger Koch emphasised that *"foodstuff is widely considered the primary source of exposure for the general population"*. Dr Koch also sets out a number of studies in which some of the DEHP values of subjects that did not undergo any medical treatment or transfusion are similar to those of the Athlete.

246. In any case, the Athlete considers the levels of DEHP in his 20 July 2010 sample immaterial, since that sample did not contain any clenbuterol. That he may have had elevated levels of DEHP in his 20 July 2010 sample is not an offence and does not explain how clenbuterol entered his system on his 21 July 2010 test.

247. Also, Mr Contador assesses that the Appellants' reliance on the levels of DEHP in his samples in fact provides conclusive evidence that clenbuterol could not have entered his system by way of transfusion. As reported by Dr Koch's *"If the clenbuterol had entered the athlete's system via contaminated blood/plasma and was therefore detectable in the urine sample collected on July 21,*

2010, there would need to have been enough time for the clenbuterol to be excreted via urine. However, if this was the case, significant levels of DEHP metabolites should have been detectable in the urine samples. Therefore, the detection of clenbuterol in the urine sample collected on July 21, 2010 and the low phthalate metabolites levels from that same sample actually contradicts the theory that clenbuterol might have entered the athlete's system via a blood or plasma transfusion".

248. The Appellants' blood transfusion theory is thus not a possibility and may be eliminated from the Panel's assessment as to how clenbuterol entered the Athlete's system. For the sake of completeness, however, the Athlete nevertheless exposed other reasons for which the transfusion theory is impossible.

249. In the Athlete's answer, the argument was raised that transfusions will always result in a spike of plasticisers. Therefore, had the Athlete transfused plasma between his test on 20 July 2010 and his test on 21 July 2010, the levels of plasticiser in his 21 July 2010 test would necessarily have spiked. However, the levels of plasticiser in that sample were normal and corroborate, therefore, the Athlete's contentions that he did not undergo any transfusion.

250. In addition, it was put forward by the RFEC in its answer that there is no direct relationship between a certain level of phthalates and the existence of a possible blood transfusion. If this is not used as a doping detection practise today, it must simply be because it is not a valid and scientific method. Therefore, the Panel must take into consideration that in order for the level of phthalates to be used as a method of recognizing doping, which proves the use of blood transfusions, such method needs to be properly approved by the scientific community.

251. During the hearing, WADA requested the opportunity to address questions to its expert Dr Ashenden in relation to the issue of the possible use of phthalate-free bags for transfusion of plasma.

252. The Athlete opposed this request mainly on the ground that this issue was not dealt with by Mr Ashenden in his expert opinion.

253. The Panel decided to deny the request, based on the two following reasons:

- Under Article R51 of the CAS Code, if WADA wanted Dr Ashenden to testify on this issue this should have been included in his expert opinion, and addressing questions to him on that issue at such a late stage is not allowed in principle under Article R56 of the CAS Code and in this case would be unfair.
- As the experts were heard, at the request of the parties, by means of an expert conference, the Panel issued on 11 November 2011 a detailed and precise explanation as to the manner and order of examination of the experts. None of the parties raised any objection as to the modalities of examining the experts as provided in the order by the Panel, meaning that, if allowed, the request of the Appellants would amount to a deviation from such order and could create some unbalance between the parties in respect of the sequence in which they expected their respective evidence was to be brought.

254- However, the Panel allowed the Appellants to address questions on this same issue to Mr Scott, the expert for the Respondent.

255. In light of this decision of the Panel, the Appellants indeed asked Mr Scott whether he knew about a practice in professional cycling whereby riders wishing to use blood transfusion would use different sorts of bags for the storage/transfusion of red blood cells and plasma. Mr Scott answered that he had heard of the existence of different types of bags, but that he was not an expert in this area. Furthermore, Mr Scott explained that for long-term storage, red blood cells needed to be stored in DEHP bags to prevent the breaking down of the red blood cells, whereas there was no such necessity for the storage of plasma.

255. Mr Scott also stated that it is possible that plasticisers may be present as a result of plasma transfusion even if the plasma was stored in DEHP-free bags since plasticisers could derive from the "tubing" used with the bag for a transfusion.

256. Although the issue of the use of DEHP-free bags as an explanation for the differences in the values of plasticisers in the 20 and 21 July 2011 tests was not specifically dealt with in the second written submission of WADA, in light of the evidence adduced at the hearing, mainly via the answers of Mr Scott and the article referred to in Dr Geyer's expert opinion, the Panel cannot rule out the possibility that the blood transfusion theory is possible despite the fact that a phthalate peak was only recorded in the sample provided by the athlete on 20 July 2010. Indeed, if Mr Contador had a blood transfusion on 20 July 2010 (which caused the presence of plasticisers) and a plasma transfusion on 21 July 2010 in order to dilute the blood (which caused the presence of clenbuterol, but not the presence of plasticisers), the absence of a spike in the level of plasticisers could be explained if the plasma was stored in a DEHP-free bag.

cc) The Pharmacological and Toxicological possibility

257. According to Mr Contador, in constructing the blood transfusion theory, the Appellants failed to consider 1) how much clenbuterol the donor, whose plasma the Athlete is alleged to have transfused, would need to have had in his system in order for his plasma to contain a sufficient concentration of clenbuterol to produce a 50 pg/mL reading in the person infusing that plasma; and 2) the toxicological effect that such amount would have had on the donor.

258. The Athlete's pharmacologist, Dr Tomás Martín-Jiménez, evaluated the plausibility of the blood transfusion theory proposed by the Appellants from a pharmacological and toxicological perspective. Dr Tomás Martín-Jiménez concludes that: *"a typical course of clenbuterol doping treatment would not produce sufficient concentration of the drug in the plasma of the donor to produce a dose in 250 mL of plasma that would account for the 50 pg/mL observed in the urine of Alberto Contador. The dose necessary to achieve that mark would need to be much larger and in fact would be toxic to the donor, even considering the pharmacokinetic model most favourable to Dr Ashenden's theory. In fact, the results of the clenbuterol excretion study performed in Cologne indicate that the donor of the plasma would have needed to receive a highly toxic dose of the drug in order to produce a concentration in plasma that would result in the 50*

pg/mL in the urine of the Athlete following infusion of the donor's plasma. […] Based on the results of this study, we consider that the scenario presented by Dr Ashenden in his plasma infusion theory is impossible as a cause of the traces of clenbuterol found in the urine of Alberto Contador during the 2010 Tour de France".

259. Dr Martín-Jiménez' opinion is supported by Dr Vivian James who concludes that *"it is my opinion that it would not have been possible for clenbuterol to have been present in a plasma sample in a sufficient amount to produce the positive urine result that was found. It is unlikely that any human donor could have tolerated the amount of clenbuterol required to achieve the plasma concentration necessary to result in a urinary concentration of 50 pg/mL following transfusion of that plasma".*

260. In its second submission, WADA presented an expert report by Dr Olivier Rabin. This report was reviewed by Boehringer Ingelheim in order to establish whether Dr Rabin's report was compatible with a study made by Boehringer Ingelheim where clenbuterol was administered as an intravenous infusion to six subjects. Boehringer Ingelheim concluded that the calculations contained in the report of Dr Rabin *"are compatible with the scientific information published on clenbuterol's pharmacokinetics by our company as well as with the unpublished data generated by our company as a developer and manufacturer of this substance".*

261. According to Dr Rabin, an important difference between his study and the study of Prof. Martín-Jiménez is that the latter's study was based on oral administration of clenbuterol and not on intravenous administration. The calculations of the report by Dr Rabin demonstrate that the level of clenbuterol detected in the Athlete's Sample of 21 July 2010 is compatible with not just one, but *"several alternative scenarios of clenbuterol dosing, blood withdrawal and subsequent reinfusion of plasma".* In particular, Dr Rabin considered it perfectly possible that a plasma donor could follow and tolerate a doping regime leading to the concentration of clenbuterol found in Mr Contador's Sample.

262. This report, nevertheless, also applies the pharmacokinetic model used to simulate the oral administration of clenbuterol to the intravenous administration data for comparison purposes. Even this analysis, when applying the incorrect pharmacokinetic model (as done by Dr Martín-Jiménez in his report), demonstrates that a transfusion of contaminated plasma could perfectly feasibly have caused the clenbuterol levels detected in Mr Contador's urine.

263. According to Dr Rabin it is important to establish when the suspicious plasma transfusion took place since the blood test performed in the morning of 21 July 2010 detected low levels of clenbuterol in plasma (~1 ug/mL), whereas the urine test performed in the evening of that same day yielded 50 pg/mL of clenbuterol. In principle, such a plasma transfusion could have taken place at any time between the urine tests performed the evenings of 20 (negative for clenbuterol) and 21 July 2010 (50 pg/mL of clenbuterol). However, if the aim was to affect the results of the blood test, it is reasonable to assume that the plasma transfusion took place before such blood test, *i.e.* at some point between 19.00 (20 July) and 9.00 (21 July), *i.e.* in a period of 14 hours.

264. Dr Rabin comes to this conclusion based on the following elements:

- according to bodybuilders' blogs, and also the report of the Athlete's defence team, the doses of clenbuterol used for anabolic purposes are 100-300 ng daily;
- Dr Rabin's report posits various timeframes for the withdrawal of the blood, none of which is immediately after the last dose of clenbuterol;
- Bearing in mind the negative urine samples of Mr Contador on the evening of 20 July 2010, one can conclude that the transfusion of plasma must have taken place between the evening of 20 July and the urine test of Mr Contador on the evening of 21 July 2010 (which resulted in a finding of 50 pg/mL clenbuterol); WADA considers, however, that it is much more likely that Mr Contador transfused the plasma before (and most probable shortly before) the blood test on the morning of 21 July. The report therefore runs the calculations for a transfusion occurring both 12 and 24 hours before the urine test of the evening of 21 July 2010;
- the report assumes that Mr Contador transfused a perfectly feasible amount of plasma: 200 mL;
- the report assumes that Mr Contador would have urinated once every three hours between the transfusion and the relevant test which is an extremely fair assumption in favour of the Athlete.

265. In each of the above examples, more favourable input data could have been used. However, the report from Dr Rabin seeks to demonstrate that the blood transfusion theory is scientifically plausible even if conservative factual assumptions are made.

266. Prof. Jérome Biollaz reviewed both the expert report of Dr Martín-Jiménez that was attached to Mr Contador's answer and the above-mentioned expert report of Dr Rabin. Prof. Biollaz reports some inconsistencies in both reports. However, he comes to the conclusion that an increased variability will not change the conclusions of Dr Rabin while in Dr Martín-Jiménez's report, the conclusions are likely to change. More importantly, the incorrect adjustment made for the plasma/blood ratio by Prof. Martín-Jiménez invalidates his conclusions.

267. The final expert report on this matter was prepared by Prof. Martín-Jiménez in connection with the second written submission of Mr Contador, taking into consideration the above remarks from Prof. Biollaz, who confirmed at the hearing that Prof. Martín-Jiménez' second report was more reliable.

268. Prof. Martín-Jiménez' position remains that the blood transfusion theory is impossible as a matter of pharmacokinetics. These issues will be dealt with separately below and are based on the following arguments:

The toxic clenbuterol treatment of the theoretical donor

269. According to Prof. Martín-Jiménez, WADA's model assumes that the theoretical donor underwent a course of clenbuterol treatment so extreme that it would be likely to cause toxicity.

270. Dr Martín-Jiménez explains in his second report that *"WADA has provided no justification for using the dose in question, other than the fact it falls within a range of doses (100 to 300 ug) I examined as part of a blood transfusion study I undertook in November 2010. That range of dosage was never intended or proposed as an accurate dosing range and was not based on any user information. On the contrary it was used to provide a widely exaggerated margin of values in the blood transfusion study in order to emphasise the extent to which it was unlikely that clenbuterol came from a blood transfusion. WADA implies that the midpoint of the 100 to 300 ug range (i.e. 200 ug) reflects standard user dosage. In fact, as is developed below, a dose of 200 ug per day is an extreme amount of clenbuterol to ingest, particularly without an escalated dosage protocol"*.

271. Dr Martín-Jiménez puts forward a report according to which a dose of 60 – 120 ug per day is described to be a dose of clenbuterol typically used by athletes and bodybuilders. By contrast, WADA's model assumed the theoretical donor to have taken 200 ug of clenbuterol for 21 consecutive days. An example is given of a person having administered a dose of clenbuterol of 108.75 ug, but still having suffered *"acute clenbuterol intoxication"*.

272. During the hearing, such assumptions were rebutted by Dr Rabin as he mentioned that a single dose of clenbuterol is indeed dangerous, but that doses can increase after several days of clenbuterol administration. More specifically, it was mentioned that an ingestion of 200 micrograms of clenbuterol at once would cause side effects to most people, but if the ingestion of 200 micrograms is part of a course of administration it would have no toxic effect.

273. Furthermore, it was also clarified and approved by all experts during the hearing that a person being subject to a clenbuterol administration course could reach a 'steady-state' within 5 days, *i.e.* a state where the level of clenbuterol in this person would remain stable even if clenbuterol is still ingested in the context of a clenbuterol administration doping regime. According to Dr Rabin, following multiple oral administrations (as per therapeutic regime), a steady-state concentration of clenbuterol in plasma is reached after ~4 days, with ~500-600 pg/mL in plasma corresponding to a 40 ug/12h administration regimen and 200-300 pg/mL to a 20 ug/12h dosing.

274. According to Prof. Martín-Jiménez, the scenario of a 21-day course of clenbuterol administration of 200 ug assumes that the donor was exceptionally reckless and underwent the treatment without any fear of detection as such levels of clenbuterol are detectable during a period of 31 to 36 days.

275. This last argument was rebutted by WADA by stating that Mr Contador possibly transfused into his system the plasma of another person less likely to be submitted to a doping test.

276. Based on the evidence of the experts' opinions, the Panel notes that a single dose of 200 ug of clenbuterol is likely to cause toxic effects but that, through a planned clenbuterol regime a steady-state can be achieved, meaning that it is possible that a donor, used as an accomplice for the purpose of blood manipulations and not risking any doping tests, could be at the source of the plasma transfusion which the Appellants are alleging took place.

277. However, the question arises what motive a person that is not likely to submit to doping controls might have to take large amounts of clenbuterol if such person only has the intention of donating plasma to an athlete involved in sports at the highest levels and has no personal ambition to perform in high-level competitive sports. Inversely, if the person did have personal ambitions of that type then why would he be a donor and why would Mr Contador choose this person to be his plasma donor?

278. To sum up therefore on this point, the Panel finds that such a clenbuterol regime is theoretically possible, whether or not it were followed by the Athlete or by a third party functioning as donor, but that it is, however, rather unlikely that such a scenario actually happened.

The donation shortly after the last administration

279. Dr Martín-Jiménez is of the opinion that WADA's blood transfusion scenario can only work if it is assumed that the donor withdrew his blood within 24 hours after having taken the last in a series of 21 doses of 200 ug of clenbuterol. According to Dr Martín-Jiménez such a scenario is not consistent. In essence, WADA is asking the Panel to accept that the donor is, on the one hand, assumed to be part of a sophisticated doping scheme yet, on the other, is so dim-witted that he donated blood just hours after having taken 200 ug of a drug that is known to have a notorious slow clearance time.

280. The Panel finds that providing Dr. Martín-Jiménez's foregoing opinion is correct it is indeed curious that Mr. Contador, who is a highly professional athlete, would, on the one hand, act in a sophisticated and planned manner (using blood transfusions in coordination with infusions of plasma and perhaps the services of a third person over a period of time as an accomplice for blood manipulations) and, on the other hand, act in such a negligent manner by receiving plasma from a donor having very recently finished a clenbuterol regime. Of course mistakes and miscalculations can occur; however the Panel finds that such a sequence of events is rather unlikely.

The Athlete's urine production

281. The Athlete contends that WADA, by calculating his daily urine volume on the basis of the amount of urine reportedly provided by him during doping-control tests, vastly underestimated both the daily urine volume produced by an average male human and, more importantly, by himself.

282. In Dr Rabin's expert report attached to WADA's supplementary brief, it is assumed *"that the First Respondent would have urinated once every three hours between the transfusion and the relevant test which is an extremely fair assumption in favour of the athlete"*. WADA's assumption is based on a mean volume per urination of 140 mL derived from *"data about urine volume delivered by the athlete for several doping tests conducted by the UCI"*.

283. Prof. Martín-Jiménez also assumed 8 urinations, i.e. one every 3 hours. However, WADA assumed a total daily urine volume of 1.12 L compared to Prof. Martín-Jiménez's 1.5 L.

284. The Boehringer Ingelheim study that delivered the Intravenous data relied upon by Dr Rabin was derived from six test subjects, one of whom was apparently of a similar weight to the Athlete. The conclusion of WADA that the calculations regarding this person show a 25% greater concentration of clenbuterol than in Mr. Contador's sample, is misguided according to Prof. Martín-Jiménez, since in pharmacokinetics it is well known that one needs to study a large population of individuals in order to quantitatively describe relationships between demographic or clinical variables and drug exposure parameters.

285. According to the Athlete, the volumes relied upon by WADA are flawed. One cannot deduct from the data based on a few doping tests the total daily urine volume, since the volume gathered during doping control tests is limited by the size of the urine collection vessel. In addition the Athlete points out that, for reasons of hygiene, he never fills the whole vessel to the brim.

286. The Athlete therefore conducted a test of his own, to use as evidence in this proceedings, and on such basis filed a report concluding that he produced an average daily volume of urine of 2.115 L.

287. The Panel accepts the allegation that an athlete for reasons of hygiene would usually not fill the collection vessel to the brim. However, based on all the evidence adduced and in particular the expert testimony at the hearing, including Dr Ashenden's indication that professional athletes usually have a lower urine production than normal persons due to being partially dehydrated, the Panel is reluctant to accept that the Athlete has an average urine production of 2.115 L per day. In reaching this conclusion the Panel took into account that, on the one hand, the sample was taken during the Tour de France and, on the other, that it was not collected during the competition but on a rest day. In this respect the Panel rejects the assertion of Mr Contador in his submissions stating that, since it was a rest day the test should not have been considered an in-competition test. In doing so, the Panel refers to the definitions contained in the UCI ADR, according to which *"In-Competition refers to the period that starts one day before or, in the case of a major tour three days before the day of the start of an Event and finishing at midnight of the day on which the Event finishes"*. In addition, the Panel took into consideration that the Athlete's test was not carried out in a controlled environment, corresponding to the typical conditions required of a scientific experiment.

288. However, one must also note that the data coming from WADA concerning the Athlete did not come from a scientifically controlled environment either. Hence the data before this Panel

must be evaluated and used with caution. Summing up, therefore, the Panel finds that an average urine production of 2.115 L is rather at the high end of the possible range when assessing the blood transfusion as a whole.

Fitting to the data

289. The experts also debated on the topic of "data fitting" during the hearing.

290. According to WADA, the oral model (for the intake of Clenbuterol) used by Prof. Martín-Jiménez is incorrect.

291. However, Prof. Martín-Jiménez is of the opinion that the model used in this particular case to obtain predictions is less important than the fitting of the data at hand. Furthermore, Prof. Martín-Jiménez is of the opinion that the intravenous data upon which Dr Rabin relied is not well fitted, which skewed the results obtained and reported. By way of illustration, Prof. Martín-Jiménez states that he was able to better fit the intravenous data to his old oral model than Dr Rabin did with his intravenous model. In practical terms, this allegedly would mean that the results obtained and reported by Dr Rabin in relation to urinary concentrations of clenbuterol were biased in favour of WADA's position. In order to obtain more accurate predictions based on the intravenous data, Prof. Martín-Jiménez applied the intravenous data to his own intravenous model.

292. The panel took note of the differences of opinions between the two experts in relation to this issue of fitting.

293. However, with respect to the overall assessment and conclusion in respect of the blood transfusion theory, the panel considers that the impact on the findings of the experts' deriving from their different approaches to the fitting of the data is insignificant enough to not require a determination as to which method is better suited.

d) The Panel's conclusions regarding the Blood Transfusion Theory

294. As a preliminary matter, the Panel notes that the primary object of this appeal is the finding of a Prohibited Substance (clenbuterol) in the Athlete's Sample.

295. Only on a secondary basis is the Panel invited to consider the scenario of a blood transfusion. Indeed, neither the UCI nor WADA initiated nor requested to initiate disciplinary proceedings against Mr Contador in respect of an alleged blood transfusion; the theory of the blood transfusion having only been raised, together with the food supplement's scenario, by the Appellants as an explanation for the adverse analytical finding, i.e. as alternative explanation for the presence of clenbuterol in the Athlete's system compared to the meat contamination scenario relied on by him.

296. In other words, the Appellants did not initiate the disciplinary proceedings on the grounds of an alleged blood transfusion.

297. In his submissions, the Athlete has criticized the foregoing fact – i.e. the lack of direct correlation between the charge brought and the facts invoked to evidence the existence of an anti-doping violation – and has shown obfuscation in that connection, arguing that such approach of the anti-doping authorities is unacceptable.

298. The Panel is of the opinion that the foregoing criticism is incorrect.

299. As explained above, the Appellants could not in the case at hand simply contest the contaminated meat scenario, but – due to their obligation to cooperate in elucidating the facts – had to substantiate their contestation, i.e. they were bound to give an explanation as to why they thought the contaminated meat scenario was untrue and why they believed such scenario to be impossible or at least less likely than other alternative scenarios.

300. In view of this obligation to cooperate in establishing the facts of the case and considering that neither the applicable rules nor principles of fairness dictate otherwise, the Panel finds that – subject to the comments below concerning their procedural approach – the Appellants cannot be criticized for invoking and defending their alternative scenarios, including the blood transfusion theory. However, the Panel notes, in weighing the evidence before it, that neither UCI nor WADA were apparently confident enough to bring a doping charge against the Athlete based directly on their allegation of a blood transfusion.

301. To sum up, for the above reasons, the Panel finds that although the blood transfusion theory is a possible explanation for the adverse analytical finding, in light of all the evidence adduced and as explained above, it is very unlikely to have occurred.

302. The Panel has thus concluded that both the meat contamination scenario and the blood transfusion scenario are – in principle – possible explanations for the adverse analytical findings, but are however equally unlikely. In the Panel's opinion there is no need to further investigate the relationship between the two foregoing scenarios since, as will be detailed below, the third scenario (the contaminated supplements scenario) is not only possible, but the more likely of the three.

F. The Supplement scenario

a) Submissions by the Parties

303. According to WADA, another plausible scenario is that the adverse analytical finding results from a contamination through a food supplement.

304. The existence of contaminated food supplements in general is uncontested and there are numerous cases of athletes who have tested positive after having ingested contaminated food supplements.

305. WADA points out that such food supplement contaminations have also involved clenbuterol and in that connection it invokes as an example the CAS 2009/A/1870 case, which was adjudicated by the CAS.

306. In the CAS 2009/A/1870 case, the athlete tested positive for clenbuterol, like Mr Contador. After being informed of her positive result, she had the food supplements she was regularly taking tested by a laboratory. The analysis showed that those supplements were tainted with clenbuterol. The contaminated supplement was supplied by AdvoCare, an established health and wellness company, which endorses hundreds of top-level American athletes like Ms *CAS* 2009/A/1870.

307. This case illustrates – according to the Appellants – that it is possible for an athlete to test positive for clenbuterol because of a contaminated supplement even if the product is purchased over the counter from an apparently reliable source. Furthermore, this case shows that the substance involved here, *i.e.* clenbuterol, is precisely one that can be found in food supplements.

308. Mr Contador contested these allegations by submitting that he only used the food supplements of the Astana team. In that connection, Mr Contador provided a list of the food supplements used by the Astana team during the 2010 Tour de France. This list was drawn up by Mr José Marti, assistant coach, and Mr Valentin Dorronsoro, chief masseur, of the Astana team. In a statement dated 9 November 2010, Mr Marti Marti and Mr Dorronsoro confirmed that Mr Contador used these food supplements.

309. According to WADA, Mr Contador's allegation is not verifiable and no analysis has been provided to show that these supplements could not be contaminated. One of the reasons for that could be that in this case, Mr Contador knew that he would not escape a sanction as the use of food supplements is rarely considered as a fully exonerating explanation.

310. WADA submits that it is more likely to test positive for clenbuterol as a consequence of the use of a contaminated food supplement than as a consequence of consumption or ingestion of contaminated meat as alleged by Mr Contador.

311. The UCI also invokes an investigation conducted by Dr Geyer confirming an important incidence of contaminated food supplements and, in addition to the CAS 2009/A/1870 case, points to a number of other CAS awards where the presence of a prohibited substance in the athletes system was ascribed to the ingestion of a food supplement that was contaminated with a prohibited substance: TAS 2008/A/1675, TAS 2006/A/1120, CAS 2008/A/1489 & 1510 and CAS 2002/A/385.

312. According to Mr Contador, the Appellants' supplement scenario is simply a fall-back position and is not corroborated by any evidence whatsoever and amounts to the following allegations:

a) the Athlete was taking supplements;

b) supplements have in the past been found to be contaminated with prohibited substances; and therefore

c) the clenbuterol in the Athlete's sample could have come from a contaminated supplement.

313. For the Athlete, the Appellants' unproven assertion is further evidence that they are not seeking the truth in this case but are merely attempting to obtain a conviction against him at all costs, since they have lost all objectivity. That notwithstanding, the Athlete has set out reasons for which he considers the Appellants' supplement scenario carries no credence.

314. In his witness statement, Mr Contador declares that he did not take any supplements between his anti-doping tests on the 20th July and 21st of July 2010. The supplements which he normally takes were taken during race days alone (either before or during the race) and not on rest days. It is therefore impossible that the clenbuterol detected in his Sample could have originated from a supplement he was taking. The analysis of the Appellants' supplement theory should therefore end here.

315. However, for the sake of certainty, the Athlete has set out other reasons for which it considers it is beyond question that supplements were not the cause of the positive test.

316. Mr Contador listed all the supplements that were made available to the Astana riders throughout the 2010 season and the 2010 Tour de France. Each of the nine riders who comprised the 2010 Astana Team have confirmed in their witness statements that: 1) those supplements were indeed the supplements made available to them throughout both the 2010 season and the 2010 Tour de France; and 2) which of those supplements each rider took, and how frequently they took them.

317. The Athlete affirms that he did not take any other supplements other than those listed: *"I do not, and did not during the 2010 Tour, take any supplements other than those specifically checked by the doctor and made available through the team. I did not during the 2010 Tour take any supplements other than those which I identify in Exhibit AC4. The whole point of taking only what the team doctor has approved is to avoid any inadvertent contamination, and so I am rigorous in following this approach"*.

318. Every rider on the Astana team underwent at least two anti-doping control tests during the 2010 Tour de France and considerably more during the 2010 season. Only one of them failed a doping control test in 2010: the Athlete himself.

319. Plainly, if any of those supplements had been contaminated with clenbuterol, then there is a very high likelihood that other riders from the Astana team would also have tested positive for clenbuterol during the course of the 2010 season or at least during the course of the 2010 Tour de France.

320. Three of the nine riders at Astana in 2010 remained for the 2011 season. All three have confirmed that the same supplements than in 2010 were made available by Astana to its riders in 2011. No rider from Astana has tested positive for clenbuterol or any other banned substance in 2011 despite the numerous tests they have undergone throughout the season. Again, if any of those supplements were contaminated with clenbuterol, then there is a very high likelihood that at least one rider from the 2011 Astana team would have tested positive for clenbuterol.

321. Furthermore, Mr Contador argues that in support of their position, the Appellants have cited the only case ever (to the best of the Athlete's knowledge) in which clenbuterol was found as a contaminant in a supplement (CAS 2009/A/1870), and points out that the manufacturer in that case, AdvoCare, did not supply Astana with any supplements in 2010, nor did Astana provide its riders with any AdvoCare products in 2011.

322. The Athlete has approached each of the six manufacturers that produced the products made available to the Astana riders in 2010 and received confirmation that:

a) none of them use or store clenbuterol or any other substance from WADA's Prohibited List in their warehouses;

b) none of them have ever been blamed for an athlete's positive anti-doping test; and

c) all of them carry out external, independent testing of their products, none of which have ever revealed the presence of clenbuterol.

323. The Panel notes that the Appellants do not contest the three foregoing points.

324. According to Mr Contador, those declarations by the supplement manufacturers, in themselves, render it virtually impossible that clenbuterol could have been a contaminant in any of the supplements the Athlete was taking.

325. For Mr Contador, the Appellants therefore argue in a last desperate bid that he may have been taking a supplement that he deliberately did not disclose because he *"knew that he would not escape a sanction as the use of food supplements is never considered as a fully exonerating explanation"*.

326. Mr Contador submits that the Appellants suggestion here assumes that the Athlete would have known which one of the supplements he was taking was contaminated with clenbuterol and thus deliberately chose not to disclose information about that particular supplement when he provided the RFEC the names of the 27 different supplements that were made available by the Astana team to its riders.

327. According to Mr Contador, not only is the Appellants' submission in this regard a preposterous speculation, it is also yet more evidence of the repulsive approach taken by the Appellants to the Athlete's case. The Panel need only consider how the unsubstantiated proposition made by the Appellants here would be received if it were made by an athlete who claimed his positive test had been caused by a supplement.

b) Findings of the Panel

328. The Panel considers – based on the evidence before it – that the supplement theory is possible. This is true even if one assumes that Mr Contador only took one of the supplements contained in the list.

329. Quality checks of products and/or regular doping tests on the athletes of the First Respondent's team may render an adverse analytical finding based on contaminated supplements less likely, but do not exclude it. In the same manner as the random controls performed on livestock farming in Spain and Europe cannot guarantee that contaminated meat will not reach the consumer, the above-described precautions cannot exclude that a contaminated batch of supplements reaches an athlete.

330. In respect to whether or not the First Respondent may have used supplements not mentioned on the list, the Panel is of the opinion that the assertions of the Athlete himself and the statements of his teammates are insufficient in terms of evidence to rule out that possibility.

331. Having found that it is possible that the adverse analytical finding was caused by the ingestion of contaminated food supplements, it remains to be examined whether the meat contamination theory or the food supplement theory is more likely to have occurred.

G. Is the Meat Contamination Theory more likely to have occurred than the Supplement Theory?

332. As has been shown above, the Panel has to assess the likelihood of different scenarios that – when looked at individually – are all somewhat remote for different reasons.

333. However, since it is uncontested that the Athlete did test positive for clenbuterol, and having in mind that both the meat contamination theory and the blood transfusion theory are equally unlikely, the Panel is called upon to determine whether it considers it more likely, in light of the evidence adduced, that the clenbuterol entered the Athlete's system through ingesting a contaminated food supplement. Furthermore, for the reasons already indicated, if the Panel is unable to assess which of the possible alternatives of ingestion is more likely, the Athlete will bear the burden of proof according to the applicable rules.

334. Considering that the Athlete took supplements in considerable amounts, that it is incontestable that supplements may be contaminated, that athletes have frequently tested positive in the past because of contaminated food supplements, that in the past an athlete has also tested positive for a food supplement contaminated with clenbuterol, and that the Panel considers it very unlikely that the piece of meat ingested by him was contaminated with clenbuterol, it finds that, in light of all the evidence on record, the Athlete's positive test for clenbuterol is more likely to have been caused by the ingestion of a contaminated food supplement than by a blood transfusion or the ingestion of contaminated meat. This does not mean that the Panel is convinced beyond reasonable doubt that this scenario of ingestion of a contaminated food supplement actually happened. This is not required by the UCI ADR or by

the WADC, which refer the Panel only to the balance of probabilities as the applicable standard of the burden of proof. In weighing the evidence on the balance of probabilities and coming to a decision on such basis, the Panel has to take into consideration and weigh all of the evidence admitted on record, irrespective of which party advanced which scenario(s) and what party adduced which parts of the evidence.

335. That said, the Panel finds it important to clarify that, by considering and weighing the evidence in the foregoing manner and deciding on such basis, the Panel in no manner shifted the burden of proof away from the Athlete as explained above (see *supra* §§ 91-113). The burden of proof only allocates the risk if a fact or a scenario cannot be established on a balance of probabilities. However, this is not the case here.

336. Consequently, the Athlete is found to have committed an anti-doping violation as defined by Article 21 UCI ADR, and it remains to be examined what the applicable sanction is.

The Sanctions

337. It is undisputed that it is the first time the Athlete is found guilty of an anti-doping rule violation.

338. As already mentioned, Article 293 UCI ADR reads as follows:

"The period of Ineligibility imposed for a first anti-doping rule violation under article 21.1 (Presence of a Prohibited Substance or its Metabolites or Markers), article 21.2 (Use or Attempted Use of a Prohibited Substance or Prohibited Method) or article 21.6 (Possession of a Prohibited Substance or Prohibited Method) shall be

2 (two) years' Ineligibility

unless the conditions for eliminating or reducing the period of Ineligibility as provided in articles 295 to 304 or the conditions for increasing the period of Ineligibility as provided in article 305 are met".

339. Pursuant to this provision, the period of ineligibility shall be two years. Accordingly, there is no discretion for the hearing body to reduce the period of ineligibility due to reasons of proportionality.

340. As none of the conditions for eliminating or reducing the period of ineligibility as provided in Articles 295 to 304 UCI ADR are applicable – in particular because the exact contaminated supplement is unknown and the circumstances surrounding its ingestion are equally unknown – the period of ineligibility shall be two years.

The Starting date of the Period of Ineligibility

341. Article 314 UCI ADR determines that *"Except as provided under articles 315 to 319, the period of Ineligibility shall start on the date of the hearing decision providing for Ineligibility or, if the hearing is waived, on the date Ineligibility is accepted or otherwise imposed"*.

342. Furthermore, Article 315 UCI ADR determines that *"Where there have been substantial delays in the hearing process or other aspects of Doping Control not attributable to the License-Holder, the hearing body imposing the sanction may start the period of Ineligibility at an earlier date commencing as early as the date of Sample collection or the date on which another anti-doping rule violation occurred"*.

343. The Panel is of the opinion that such provision is applicable in the present matter.

344. In that relation, the Panel notes that the Appellants did not respond to the request of the CNCDD of the RFEC to file an additional submission in order to rebut the reports presented by the Athlete in the first instance. Because the Appellants refrained from explaining their positions in more detail despite such request, the CNCDD of the RFEC was unable to make a decision with the benefit of the entire picture of the Appellants' allegations and evidence that was subsequently presented to this Panel; whereas it is possible that with a fuller picture the CNCDD of the RFEC might have decided the case more rapidly and differently, which in turn might have affected the occurrence of an appeal to the CAS.

345. Furthermore, the proceedings before CAS lasted for over nine months and the hearing was postponed twice, while delays cannot be specifically attributed to the Athlete or to CAS and the Panel agrees with the Athlete's submission that his requests for extension during the present proceeding were a direct consequence of having to address and answer the Appellants' complex submissions on the blood transfusion theory as to the source of the prohibited substance which was not developed in front of the first instance.

346. According to Article 315 UCI ADR the Panel is entitled to fix the start of the period of ineligibility at an earlier date commencing as early as the date of Sample collection.

347. Taking into consideration all of the above elements, the Panel deems it fair to order that the period of ineligibility will commence and be counted as of the date on which Mr Contador was proposed by the CNCDD of the RFEC to be suspended for one year, namely 25 January 2011.

348. According to Article 317 UCI ADR *"if a Provisional Suspension or a provisional measure pursuant to articles 235 to 245 is imposed and respected by the License-Holder, then the License-Holder shall receive a credit for such period of Provisional Suspension or provisional measure against any period of Ineligibility which may ultimately be imposed"*.

349. The Panel notes that Mr Contador was provisionally suspended upon receiving UCI's official notification of the provisional suspension on 26 August 2010 and not on 24 August 2010 as stipulated in Mr Contador's answer. The Athlete remained provisionally suspended until he

was acquitted by the CNCDD of the RFEC on 14 February 2011. Thus, the Athlete's provisional suspension lasted 5 months and 19 days. As argued by Mr Contador, Article 317 UCI ADR is a mandatory requirement to which effect must be given, meaning that the foregoing period of provisional suspension must be deducted from the period of ineligibility.

350. According to Article 288, *"A violation of these Anti-Doping Rules in connection with an In-Competition test automatically leads to Disqualification of the individual result obtained in that Competition"*.

351. Additionally, Article 289 UCI ADR provides the following:

"Except as provided in articles 290 and 291, an anti-doping rule violation occurring during or in connection with an Event leads to Disqualification of the Rider's individual results obtained in that Event according to the following rules:

[…]

1. If the violation involves

a) the presence, Use or Attempted Use of a Prohibited Substance or a Prohibited Method (articles 21.1 and 21.2), other than a Specified Substance;

[…]

all of the Rider's results are disqualified, except for the results obtained (i) in Competitions prior to the Competition in connection with which the violation occurred and for which the Rider (or the other Rider in case of complicity) was tested with a negative result, and (ii) in Competitions prior to the Competition(s) under point i".

352. Appendix 1 to the UCI ADR refers to Article 12.1.022 of the UCI Cycling Regulations to define "Disqualification". According to this Article the meaning of Disqualification includes, inter alia:

"The disqualification of a rider shall incur invalidation of results and his being eliminated from all classifications and losing all prizes, points and medals in the race in question. […]".

353. Article 313 UCI ADR provides that:

"In addition to the automatic Disqualification of the results in the Competition pursuant to article 288 and except as provided in articles 289 to 292, all other competitive results obtained from the date a positive Sample was collected (whether In-Competition or Out-of-Competition) or other anti-doping rule violations occurred, through the commencement of any Provisional Suspension or Ineligibility period, shall, unless fairness requires otherwise, be Disqualified.

Comment:

3. it may be considered as unfair to disqualify the results which were not likely to have been affected by the Rider's anti-doping rule violation.

4. […]".

354. In his answer, Mr Contador submits that it would be unfair and disproportionate to disqualify any results he has obtained following the decision of the CNCDD to exonerate him given that:

a) it is common ground that the amount of clenbuterol in the Athlete's system on 21 July 2010 was too small to have had any effect whatsoever. Any results subsequently obtained by the Athlete cannot therefore have been affected;

b) the Athlete was suspended for almost 5 months but then exonerated and allowed to compete by the CNCDD;

c) it would be absurd to expect an athlete not to resume competing after having been cleared of any wrong-doing by his/her national federation; and

d) the Athlete has undergone approximately 20 tests since he has resumed competing, all of which he has passed.

355. The Athlete refers the Panel to the following CAS awards in which various CAS panels held that the athletes had committed anti-doping rule violations but decided not to disturb results achieved by those athletes before the commencement date of their sanction: CAS 2007/A/1396 & 1402, CAS OG 06/001 and CAS 2007/A/1283.

356. The Panel considers that the fairness considerations invoked by the Athlete do not apply in this case because he is in effect requesting that results obtained after the commencement of the ineligibility period be maintained.

357. That would not only be in contradiction with the sanction of ineligibility itself, but would also be unfair compared to the treatment of the majority of athletes who are provisionally suspended from the outset due to non-contested positive anti-doping test and whose provisional sanction is never lifted, thereby never having the opportunity to enter any competitions and obtain results/prizes pending the final resolution of the anti-doping violations charges. For reasons of fairness, the Panel has decided above to start the Athlete's ineligibility period at a much earlier date than what would in principle apply. The consequence of that cannot be that the results obtained after the beginning of such period would not be affected.

358. For the above reasons, the Panel decides that the 2010 Tour de France result of Mr Contador shall be disqualified as well as the results obtained in all competitions he participated in after 25 January 2011, which is the date when according to the Panel's decision the ineligibility period is deemed to have begun.

Conclusion

359. In summary, the Panel concludes that:

a) the Athlete's positive test for clenbuterol is more likely to have been caused by the ingestion of a contaminated food supplement than by a blood transfusion or the ingestion of contaminated meat;

b) no evidence has been adduced proving that the Athlete acted with no fault or negligence or no significant fault or negligence;

c) a two year period of ineligibility shall be imposed upon the Athlete, running as of 25 January 2011;

d) the 2010 Tour de France result of Mr Contador shall be disqualified as well as the results obtained in all competitions he participated in after 25 January 2011 when the ineligibility period is decided to have begun.

The Court of Arbitration for Sport rules that:

1. The appeals filed by the Union Cycliste Internationale on 24 March 2011 and by the World Anti-Doping Agency on 29 March 2011 against Mr Contador and the Real Federación Española de Ciclismo concerning the decision of the Comité Nacional de Competicion y Disciplina Deportiva of the Real Federación Española de Ciclismo dated 14 February 2011 are partially upheld.

2. The decision of the Comité Nacional de Competicion y Disciplina Deportiva of the Real Federación Española de Ciclismo dated 14 February 2011 is set aside.

3. Mr Contador is sanctioned with a two-year period of ineligibility starting on 25 January 2011. The period of the provisional suspension will be credited.

4. Mr Contador is disqualified from the Tour de France 2010 with all of the resulting consequences including forfeiture of any medals, points and prizes.

5. Mr Contador is disqualified of the results of all the competitions he participated in after 25 January 2011 including forfeiture of any medals, points, and prizes.

6. (…).

7. All other or further claims save for the fine issue pursuant to Article 326 of the UCI Anti-Doping Regulations which remains to be decided in a separate award, are dismissed.