Appendix N to USADA's Reasoned Decision

Overview of Evidence in the Freiburg University Clinic Doping Investigation

1. Allegations of systematic doping on Team Telekom

In April, 2007, Jef D'hont, who had been employed by the Team Telekom cycling team as a masseur from 1992 to 1996, went public to the German magazine *Der Spiegel* alleging doping of cyclists on Team Telekom by Dr. Lothar Heinrich and Professor Andreas Schmid, sports medicine doctors at the Freiburg University Department of Rehabilitative and Preventive Sports Medicine ("Freiburg Clinic") in Germany. Shortly thereafter, Freiburg University established its Inquiry Commission to investigate the matter and to reconstruct how the doping of the cyclists out of the Freiburg Clinic was conducted, the conclusions of which were detailed in the Commission's Final Report of the Expert Commission investigating the accusations of doping against doctors in the Sports Medicine Department of the Freiburg University Clinic (the "Freiburg Report"). The Freiburg Report contains a detailed review of extensive documentation of doping and of many interviews conducted by the Inquiry Commission.

2. Admissions by doping program participants and the general framework of the doping at Freiburg

Less than a month after the public statements by D'hont, both Dr. Heinrich and Dr. Schmid admitted through written declarations that they had doped cyclists on the team with EPO.¹ A week later, a third sports medicine doctor, Dr. Georg Huber, admitted prescribing testosterone (Andriol capsules) to U23 road race cyclists between 1980 and 1990.² In addition to these declarations, the Commission conducted a thorough investigation, including the interviews

¹ Freiburg Report, at 11.

² *Id.*; see also 26. Dr. Heinrich and Dr. Schmid declined to speak with the Commission; however, Dr. Huber went before the Commission.

of over seventy individuals.³ However, many individuals, including fourteen cyclists linked to the affair declined to participate in the investigation at the invitation of the Commission.⁴ Nonetheless, the Commission's report detailed its findings that the German cycling team known as Telekom beginning in the late 1980s and as T-Mobile from 2004 to 2007 had a sophisticated doping program run out the Freiburg Clinic by Drs. Heinrich, Schmid, and Huber.

In 1992, Jef D'hont was hired as soigneur by Team Telekom.⁵ At the time, D'hont was known for his "magic drink" which contained orciprenaline, banned by the IOC since 1992, and a 300 mg capsule of caffeine, dissolved in cola.⁶ According to D'hont, the subject of doping was raised during his first contact with Dr. Schmidt in 1992.⁷

The Commission found credible D'hont's claim that of the 17 riders on the 1993-1994

Telekom team, eight (Bert Dietz, Christian Henn, Brian Holm, Olaf Ludwig, Steffen Wesemann, Rolf Aldag, Udo Bolts, and Jens Heppner) were using other doping agents as well as his "magic drink." In addition to EPO, glucocorticosteroids, growth hormone, and testosterone were also administered to Telekom/T-Mobile riders through the Freiburg Clinic.⁹

In 2007, Dietz, Henn, Holm, Aldag, and Bolts, all admitted doping. ¹⁰ Other riders repeatedly asked for EPO, which Schmid supplied and which was then injected by D'hont or the

³ *Id*. at 11.

⁴ *Id.* at 12. The Commission noted that although it spoke to many witnesses, one pharmacy proprietor, a German Cycling Federation coach, a doctor formerly involved in transfusion medicine, and the cyclists Kessler, Kloden, Ullrich, Baumann, Burkhart, Gerdemann, Greipel, Klier, Korff, Ludewig, Pollack, Schreck, Wesemann, and Ziegler, did not appear before the Commission.

⁵ *Id*. at 16.

⁶ *Id*.

⁷ *Id*.

⁸ *Id.* at 17.

⁹ *Id*. at 23.

¹⁰ *Id*.

EPO injections were mainly given by Heinrich. ¹² D'hont kept a record of the ampoules provided by the doctors, according to the Commission. ¹³ Mostly, the EPO and other drugs were obtained through Schmid. ¹⁴ The drugs were either supplied to the soigneur during races or couriered by DHL. ¹⁵ After D'hont left the Telekom team, the doctors either took the preparations to the riders, after agreeing to do so by telephone beforehand, or sent them via express mail or courier to the addresses at which the riders were staying while on the road. ¹⁶

Generally, doping continued between 2001 and 2005.¹⁷ This was discovered by the Commission based on the manipulation of the electronic personal identification system from 2005 by entering fictitious patients.¹⁸ Patrick Sinkewitz indicated that by 2006, the doping program administered by Heinrich and Schmid was intensifying.¹⁹ Sinkewitz confirmed Jörg Jaksche's recollection that the doctors ordered therapeutic use exemptions without medical justification in order to allow the riders to receive performance-enhancing drugs, including cortisone, in particular, for intramuscular use.²⁰

It was not until November, 2007 that the T-Mobile team lost its sponsorship, even though (1) the two leading riders, Jan Ullrich and Oscar Sevilla, along with Rudy Pevenage, team sport director, were suspended from the team on the day before the 2006 Tour de France based on their

¹¹ *Id*.

¹² *Id*. at 18.

¹*a*. at

¹⁴ *Id*.

¹⁵ Id

¹⁶ *Id*. at 19.

¹⁷ *Id*. at 21.

¹⁸ *Id*.

¹⁹ *Id*.

²⁰ *Id.* at 23.

connection with the doping doctor Eufemiano Fuentes, the main player in the Operación Puerto doping scandal, (2) in May 2007 Sergie Honchar was suspended, and (3) Patrick Sinkewitz had a June 2007 positive blood test.²¹

Both Bernard Kohl and Robert Barko provided statements regarding the Telekom team's maltreatment of them because the doctors had not dealt with them extensively on the subject of doping.²² Kohl indicated that after 2002, the medical preparation of the team members had to be discussed in private with Dr. Heinrich. 23

3. Doping with EPO

Based on the lack of team success in the 1992 Tour de France and the dominance of the Italian and Spanish teams, the German team turned to EPO. 24 It seemingly began with Uwe Ampler's doping program in which he obtained EPO and used it with the knowledge of Dr. Schmid.²⁵ Dr. Schmid also began to decide the doping dosages of another rider, whom D'hont identified as Olaf Ludwig, which was 1,000 units of EPO every 3 days with B12, folic acid, and 100mg of aspirin to thin the blood in the morning and evening. ²⁶ This was a 3 week program. ²⁷ Generally, Schmid obtained EPO and sent it via DHL to D'hont who then, with his wife, provided it to the Telekom cyclists who injected themselves. ²⁸

The Commission found that systematic EPO doping under the guidance of Doctors

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²¹ *Id*. at 66-67. ²² *Id*. at 24-25.

²⁴ *Id*. at 16.

²⁶ *Id*.

²⁷ *Id*.

²⁸ *Id*. at 17.

Schmid and Heinrich began with the team's training camp in Mallorca, Spain in January 1995.²⁹ Bert Dietz supported this finding by detailing his conversations with the doctors regarding the doctors' plan that Dietz begin treatment early so that he was ready to compete in spring classics. In those communications, Schmid went into detail about the way EPO worked, its performanceenhancing possibilities and possible dangers associated with the drugs. 30 Dietz started with 1,000 units of EPO in a three week cycle, which was administered by both Heinrich and Schmid.³¹ To complement the EPO, folic acid, vitamin B12, and iron were added in the form of two iron tablets and 2 or 3 aspirin 500 per day.³² Dietz recalled increasing his dose of EPO from 1,000 units every 2days to 2,000 units every second or third day in preparation for the 1995 Vuelta Ciclista a Espana, which increased his hematocrit to an average of 52.5%, and he indicated that for all of the 1995 season, he paid approximately EUR 3,000 for doping substances. ³³ After UCI introduced the 50% limit for hematocrit in 1997, Dietz had a blood count conducted every two to three weeks, and the cyclists began having their hematocrit levels checked every morning using centrifuges in order to ensure that in the event they had borderline levels, their hematocrits could be lowered as quickly as possible using measures such as saline solution infusions.³⁴

To prepare for daily hematocrit checks during races, part of the program was to attach 500 ml of saline solution to a hanger in Dietz's room for infusion. ³⁵ Such an I.V. would lower

²⁹ *Id*. at 17. ³⁰ *Id*.

 $^{^{31}}Id.$ at 18. $^{32}Id.$

³⁴ *Id.*; see also 19.

³⁵ *Id.* at 18.

his hematocrit between 1 and 1.5 percentage points. 36 Later, the blood substitute Haemacel would do the same thing.³⁷ As Dietz began to inject himself with EPO supplied to him by the doctors in a cool box with a cooling pack, he would also receive blood analysis and was made aware, as were other riders, of the risk of being caught with excessively high readings because of the accuracy of the centrifuges they were using.³⁸ Dietz, as did Aldag, remembered that around the 1996 Tour de France, both doctors paid careful attention to ensure the team riders did not reach health-threatening hematocrit levels. 39

Beginning in 1995, Aldag and Henn began receiving EPO with B12, folic acid, and iron, from the doctors. 40 They too eventually increased their EPO dosage to 2,000 units from the 1000.⁴¹ They generally received an EPO injection every 3 days, which was given by soigneurs and Dr. Heinrich. 42 The riders injected themselves with EPO before races. 43

Before the 1996 season, Dane Bjarne Riis, who had placed third in the 1995 Tour de France, joined Telekom, making Telekom the top team. 44 Riis went on to win the 1996 Tour de France. Ullrich, also on Telekom at the time, finished second, and Erick Zabel won best sprinter. 45 According to D'hont, during the 1996 Tour Riis took 4,000 units of EPO and two units of growth hormone, which is double the usual quantity. 46 Apparently, the result was a

³⁶ *Id*.

³⁷ *Id*.

³⁹ *Id.* at 19.

⁴⁰ *Id*. at 19.

⁴¹ *Id*. at 18.

⁴² *Id*.

⁴³ *Id*.

⁴⁴ *Id*. at 19.

⁴⁵ *Id*.

⁴⁶ *Id*.

hematocrit of at least 60%, or even 64% according to D'hont. 47

According to press admissions noted by the Commission, Udo Bolts started doping with EPO and growth hormone in 1996 in preparation of the 1996 Tour de France.⁴⁸ Erik Zabel also began a three-week EPO course in 1996 after the Tour de Suisse.⁴⁹

Jörg Jaksche joined Telekom in 1999, and was told at the traditional team training camp in January in Mallorca by Dr. Heinrich that Jaksche could see Heinrich if Jaksche needed anything. At an event at the Herzogenhorn performance center, presumably the IOC Cycling Seminar for the 2000 Sydney Olympic Games, organized by Germany's Doping-free Sport group, the German NOC, and the IOC, Jaksche received between 20,000 and 30,000 units of EPO from Dr. Heinrich, without a prescription. For this delivery, like subsequent ones, Jaksche paid Heinrich in cash. Jaksche also received from Heinrich a summary on the optimum use of EPO and on checking hematocrit levels with a centrifuge, which Jaksche obtained in 1999 as well. Jaksche received EPO deliveries either via courier or post, or he went and picked up the EPO himself from the Freiburg Clinic. When mailed, the drugs were sent either directly to him or to his girlfriend.

The Commission also reviewed receipts for "medical equipment" procured by the Freiburg Clinic in 2006. ⁵⁶ Concluding that such generalized receipt identification does not

 $^{^{47}}Id.$

⁴⁸*Id*.

⁴⁹ *Id*.

⁵⁰ *Id*. at 20.

⁵¹ Id

⁵² *Id*.

⁵³*Id*.

⁵⁴ *Id*.

⁵⁵ *Id*. at 21.

⁵⁶ *Id.* at 30.

conform to the usual business practices of a public pharmacy, the Commission found that the total for the largest item of "medical equipment" according to a receipt approximately equaled the 2006 selling price for 14 packs of 6 prefilled syringes of 1000 units of EPO or for 7 packs of 6 prefilled syringes of 2000 units of EPO.⁵⁷ The Commission was unable to determine what the item "medical equipment" actually concealed, but found it very possible that a large part of the charges documented by the receipts were for EPO to be administered to the T-Mobile team.⁵⁸ Additionally, the Commission found forged receipts from pharmacies with unusual discounts, which was suspicious given the doping activity conducted through the Freiburg Clinic.⁵⁹

In 2006, iron was used in large daily doses. Although not on the WADA Prohibited List, some of the iron being used by the Freiburg Clinic was only authorized for treating severe iron deficiency where oral, non-prescription, iron replacement was not possible. Iron deficiency is extremely rare among international athletes, which makes it highly unlikely that the iron was being administered to cyclists for medical reasons, especially considering the amount procured by the Freiburg Clinic. ⁶²

The Commission also conducted an assessment of anonymous data collected by the Freiburg Clinic between January 1, 1995 and December 31, 2007, which included data from 58,000 blood samples from 22, 264 people. ⁶³ Of the 732 people investigated for reticulocytes (off score greater than 119), 59 could be classified as unusual. ⁶⁴ Of the 59, 29 were Team

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⁵⁷ *Id.* at 30-31.

⁵⁸ *Id.* at 31.

⁵⁹ *Id.* at 32.

⁶⁰ *Id*. at 23.

⁶¹ *Id*.

⁶² *Id.* at 30.

⁶³ *Id*. at 23.

⁶⁴ *Id.* at 22.

Mobile riders since 2005. 65 Evaluating under different criteria (off score greater than 133), four samples were unusual. 66 All of these samples were from the Telekom/T-Mobile team. 67 To the Commission, given how many of the total number of patients for which data was analyzed, the data showed a high tendency towards abnormal blood values indicative of doping manipulation.⁶⁸

Independent examination of blood data by an expert of criminal prosecutors revealed blood abnormalities attributed to individual people, reduced reticulocyte counts, and increased hemoglobin concentrations in a total of nine riders and a soigneur. ⁶⁹

4. Doping with Glucocorticosteroids

Robert Lechner was 18 years old when Dr. Huber began doping him with cortisone (and steroids) in preparation for the 1988 Seoul Olympics. 70 Since 1994, Dietz was either injected by the soigneur, or he injected himself with glucocorticosteroids. ⁷¹ In 1997 and 1998, Dietz received Synacthen, which stimulates the synthesis of the body's own glucocorticosteroids.⁷² Henn indicated that part of the program was to administer cortisone preparations before the classic one-day races.⁷³

The Commission determined that in 2006, a total of 110 ampoules of glucocorticoids

66 *Id*. 67 *Id*.

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⁶⁸ *Id*.

⁷⁰ *Id*. at 41.

⁷¹ *Id*. at 23.

⁷² *Id*.

⁷³ *Id*. at 19.

were ordered for the Team T-Mobile cyclists by the doctors responsible for the team. ⁷⁴ The long lasting nature of these substances only required them to be injected every three to four weeks. 75 The Commission determined that the amount ordered by the Freiburg Clinic was equivalent to 2,391 daily doses, or enough to provide ten riders with joint injection treatment for 239 days (8 months).⁷⁶ Of course, this quantity is difficult to understand if being administered to healthy athletes such as the cyclists on the T-Mobile team. ⁷⁷ This quantity can be compared to the amounts ordered in 2007 (10 ampoules over four months) after the doping program essentially had ceased.⁷⁸

Jaksche also confirmed that he received cortisone preparations while on Telekom from 1999 to 2000. ⁷⁹ The doctors said that he had tendonitis, which was false, in order for him to receive a therapeutic use exemption from UCI. 80 Sinkewitz's statements support the conclusion that Heinrich and Schmid took responsibility for administering cortisone, and he also said they did so without legitimate medical justification.⁸¹

5. Doping with Growth Hormone

Dietz said that he obtained growth hormone from Heinrich and Schmid from the 1996 season. 82 He received growth hormone every second day during the EPO administration cycles. 83 The doctors told the cyclists on Telekom that growth hormone helped recovery and

⁷⁴ *Id.* at 29. ⁷⁵ *Id.*

 $^{^{77}}Id.$

⁷⁹ *Id*. at 23.

⁸¹ *Id*. at 59.

⁸² Id. at 23; see also 18.

⁸³ *Id.* at 23.

was not dangerous in the doses the doctors administered.⁸⁴

As stated above, according to press admissions noted by the Commission, Udo Bolts started using growth hormone in 1996 in conjunction with EPO leading up to his participation in the 1996 Tour de France. ⁸⁵ D'hont remembers Riis doing the same, receiving two units of growth hormone as part of his cycle during the 1996 Tour de France. ⁸⁶

The Commission noted that, according to D'hont, growth hormone was being used by Telekom rider Rudy Pevenage in 1994.⁸⁷

6. Doping with autologous blood transfusions

The Commission concluded that through the Freiburg Clinic, Patrik Sinkewitz, Andreas Kloden, and Matthias Kessler received blood transfusions. The Commission received statements from Patrik Sinkewitz evidencing the involvement of Schmid and Heinrich in autologous blood doping activities of the T-Mobile riders in 2006. In 2006, Sinkewitz had blood taken out and reinjected. In late October/early November 2005, in a hotel in Munich, Dr. Heinrich told Sinkewitz he was prepared to give blood transfusions. According to Sinkewitz, details of the plan were discussed at the T-Mobile training camp in Mallorca in January 2006. In January, 2006, Heinrich took approximately a half liter of blood from Sinkewitz at the Freiburg University Clinic. This behavior continued monthly thereafter.

85 *Id.* at 19.

⁸⁴ *Id*.

⁸⁶ Id.

⁸⁷ *Id.* at 23.

⁸⁸ *Id.* at 32.

⁸⁹ *Id.* at 33.

⁹⁰ *Id*.

⁹¹ *Id*.

⁹² *Id*.

⁹³ *Id*.

made the following findings related to Sinkewitz's blood doping through the Freiburg Clinic:

- -In late February 2006, Dr. Heinrich took the same quantify of blood from Sinkewitz (500 ml), and reinfused the contents of the blood bag from January, because of the limited conservation period for blood.
- -In late March, the same procedure was followed again.
- -In April, after the Tour of Basque Country from 3 to 8 April, Dr Heinrich reinjected a bag of blood for the spring classics, without taking any blood. This was because Sinkewitz, a classic rider, in agreement with Dr Heinrich, was aiming to reach the peak of his performance for this race.
- -On 2 or 3 May 2006, in Freiburg, he had another half litre of blood taken following the traditional May Day "Rund um den Henninger-Turm" race held in Frankfurt.
- -On 23 May 2006, one day before the Tour of Bavaria, Sinkewitz got Dr Heinrich to take two bags of blood, and the blood taken at the start of the month was reinjected. In this way, Sinkewitz had a stock of two blood bags with Dr Heinrich for the Tour de France. Because Patrick Sinkewitz's performance in the Tour de Suisse from 10 to 18 June 2006 had only been moderate, he believed his participation in the Tour de France to be in jeopardy. However, the team leader Rudy Pevenage dispelled these doubts, referring to Sinkewitz's plentiful own blood supplies.
- -On the Monday after the Tour de Suisse, on 19 June 2006, Dr Heinrich took a further two bags of blood from Sinkewitz in the University Clinic, and reinjected the blood from the two blood bags that had been filled on 23 May 2006. 95

Further, Patrik Sinkewitz admitted that on the first day of the Tour de France, Sunday July 2, 2006, he, Matthias Kessler, and Andreas Kloden were driven by Sinkewitz's girlfriend from Strasbourg to Freiburg. Sinkewitz's girlfriend corroborated this story. Once in Freiburg, the three riders met Schmid and were reinfused by him with their own blood. The three were then driven back to the team accommodation by a car which was waiting in the University parking lot.

 $^{^{94}}_{05}$ *Id.* at 34.

 $^{^{95}}Id.$

⁹⁶*Id.* at 34-35.

⁹⁷ *Id*.

⁹⁸ *Id.* at 35.

⁹⁹ *Id*.

The Commission also concluded that blood belonging to Sinkewitz and that labeled as belonging to three other support staff (not as Kessler's and Kloden's) was measured on July 9, 2006 at the University. 100 The values from these samples indicated a high likelihood of manipulation being carried out. 101 Six other blood tests from July 14, 2006, including that of Sinkewitz and another rider, along with four samples allegedly from team staff, revealed reticulocyte values indicative of doping. 102 The Commission concluded that it was highly unlikely that support staff should have blood values indicative of blood manipulation such as transfusions, and concluded that "it can therefore be assumed with a high degree of likelihood that the samples came from riders, but were registered under false names." ¹⁰³

7. Doping with Testosterone

Georg Huber admitted that as federation doctor for the German Cycling Federation from 1980 to 1990, particularly in 1987, he gave individual U23 road cyclists the performanceenhancing hormone testosterone. 104 Christian Henn, who was then 21 years old, was one of the riders to whom Huber administered testosterone. 105 Christian Henn rode for Telekom from 1992 to 1999, when he was caught with a high testosterone level. 106 Henn told the Commission that testosterone was offered to him by Dr. Huber and federation coach Peter Weibel. 107 The Commission found that Dr. Huber, at least in 1987 and 1988, as doctor of the German Cycling Federation, systematically doped several amateur cyclists, including Jörg Muller and Christian

¹⁰⁰ *Id*.

¹⁰¹ *Id.* at 36.

¹⁰³ *Id*.

¹⁰⁴ *Id*. at 40.

¹⁰⁵ *Id*. at 41.

¹⁰⁶ *Id*. at 17.

¹⁰⁷ *Id*. at 41.

Henn, with Andriol (which had been banned since 1984) capsules for more than the purpose of redressing an imbalance as a consequence of severe training as Dr. Huber claimed, but rather to enhance performance. 108

Among the cyclists that Dr. Huber doped was long-distance cyclist Robert Lechner, who was 18 years old when Huber began doping him with Andriol capsules, stanozolol, and cortisone in preparation for the 1988 Seoul Olympics. ¹⁰⁹ The Commission's conclusion was that Dr. Huber only doped amateur cyclist Jörg Müller with Andriol capsules in 1987 and 1988. Müller also credibly informed the Commission that he was given the Andriol capsules by his coach Weibel during circuits in the autumn of 1987. On at least one occasion, Müller was given an opened package of Andriol capsules to take home, and on another occasion he obtained the capsules from a pharmacist he knew with a prescription from Dr. Huber, and it was clear to Müller that the pharmacist was aware that he was giving Müller a doping substance. 110 Muller told the Commission that the doping administered by coach Weibel and Dr. Huber was restricted to Andriol capsules which he was given to speed up recovery. 111

Jörg Müller also obtained and took other doping substances such as testosterone and amphetamines, some of which he injected subcutaneously. 112 The suppliers of Müller's drugs in some instances were older cyclists who also told him that the superficial checks during competitions were nothing to be afraid of because the samples were only analyzed in individual

¹⁰⁸ *Id*.

¹⁰⁹ *Id*.

¹¹⁰ *Id*. at 42.

¹¹² *Id*.

cases, or only to a limited extent. 113 According to Müller, a few of his samples around 1986 should have been positive had the cyclists who told him the tests were superficial been incorrect. 114

¹¹³ *Id*. ¹¹⁴ *Id*.