REPORT OF THE INDEPENDENT OBSERVERS

Tour de France 2010

(Published 28 October 2010)

Contents

Introduction & Acknowledgments

The Independent Observer (IO) Team at the 2010 Tour de France ("the Tour") was a multinational group made up of representatives possessing a variety of expertise in anti-doping. This mission was a good reflection of the value this type of programme can add to major events, insofar that the IO Team were actively invited to attend by the International Cycling Union (UCI) who sought assistance and reassurance over its anti-doping programme.

The Tour is the most famous and gruelling of all cycling events. The 97th Tour de France covered a total distance of 3,642 km over 23 days. Starting with the Prologue, there are a further 20 stages of which nine are flat, six mountain, four medium mountain and one individual time trial. Such a race is not only demanding on the riders and their support teams but also the staff that deliver the event. This IO Mission was unique due to the continuous following of the Tour. The combined road travel of the IO Mission was estimated at around 8000km when calculating the travel involved in early morning and late evening testing, travel to hotels and to the starts in different towns to that of the previous day.

It would be easy to say that the IO Team was well received by everyone on the Tour. However, initially this was not universally the case and while the IO Team received excellent cooperation from the many parties involved in this event, it was clear from the start that there was a certain unease about the IO Team's presence, particularly from a limited number of teams. Over time this unease reduced to the extent that during the Tour the IO Team received positive comments from teams and team doctors regarding the IO Teams presence at the Tour.

The IO Team wishes to thank all those involved for their support. In particular, the IO Team would like to acknowledge all those responsible for the delivery of the anti-doping programme of the UCI for their hard work, dedication and general cooperation. More specifically, mention must go to Ms. Magali Louis, Ms. Francesca Rossi, Dr. Mario Zorzoli, Mr. Enrique González Martínez and Mr. Jean-Claude Witkowski who were tireless in their efforts to both deliver and improve the programme.

In addition, the IO Team would like to thank those working for Amaury Sport Organisation (ASO), who made every effort to ensure that the IO Team's work was completed successfully. This includes the drivers assigned to transport the IO Teams, Doping Control Staff and Doping Control Station truck who all contributed to the delivery of the anti-doping programme. The Tour is truly a logistical phenomenon and testament must go to the ASO for the highly professional manner in which they delivered this amazing event.

Executive Summary

In 2010, the UCI invited the World Anti-Doping Agency (WADA) to send an IO Team to the Tour to observe all aspects of their anti-doping programme. This included the usual scope of engagement covering all aspects from Therapeutic Use Exemptions to test distribution planning and results management. As with previous and more recent IO Reports, this IO Team fully supports the audit style approach implemented at the Tour and strongly supports this format for all future IO missions, irrespective of the level of the event.

The Mission also encompassed a unique element whereby the IO Team was required to act as a liaison between WADA and the UCI so as to facilitate the integration of intelligence from the Agence Française de Lutte contre le Dopage (AFLD) into the Tour's doping control programme. The decision rendered by WADA was a workable solution to an issue that appeared to be the result of significant and historic difficulties between the UCI and the AFLD. However, as further detailed in this report, the fight against doping is hard enough at the best of times and, without apportioning blame to either party, the lack of cooperation and trust evident between the UCI and the AFLD for the Tour was extremely disappointing to observe. The IO Team is of the firm view that urgent talks should take place between the UCI and the AFLD to resolve the current impasse and to agree how a more efficient and effective programme can be implemented for the 2011 Tour. Indeed, given the significance of the Tour it is further recommended that if either party is unwilling to engage in such talks then WADA should intervene and act as a facilitator to attempt to resolve this matter.

Given the scope and interest of the anti-doping programme for the Tour, it is not surprising that the IO Team has come forward with a number of suggestions and recommendations for the future. There are a considerable number of recommendations that the IO Team have reported in this report with a varying degree of importance to the overall anti-doping programme. Some recommendations are to ensure compliance with the relevant rules while others are purely in relation to best practice. The intention of the IO Team was to report on all observations regardless of how minor they were considered with a view to providing the UCI with substantial feedback that would further assist and enhance the UCI's programme at future tours.

The IO Team wishes to emphasise that the number of recommendations should not be viewed in any way as detracting from the IO's conclusion that the anti-doping programme at the 2010 Tour was of a good quality. The UCI's anti-doping programme has been forced to evolve rapidly over the past years due to the many instances of doping revealed at the Tour and within the sport. The IO Team believes that there are very few anti-doping programmes delivered by International Federations that come close to matching that of the UCI. Indeed it is rare to see an International Federation conduct such a comprehensive anti-doping programme and the team at the UCI should be congratulated on both their execution of their programme but also their willingness to adapt, modify and try new approaches throughout this Tour.

All that said, one area that is highlighted in this report is the need for the UCI to vary the test distribution plan in order to reduce or remove its predictability. The format of the Post-Finish test distribution plan seemed to be well known by those on the Tour and would have benefited from being more flexible and less predictable both in rider selection and analysis type. In addition, the IO Team observed a number of occasions where a more aggressive approach to testing riders outside of the Post-Finish sessions should have been undertaken. It is one thing to allow clean riders the opportunity to rest in between the gruelling stages, but it is entirely another thing to allow riders with suspicious profiles, backed up by robust intelligence, the same opportunity. It is fully acknowledged that this is a difficult balance to find, but in order to protect those riders who compete clean, the IO Team believes that the UCI has an obligation to act decisively and develop and execute testing strategies that target riders who demonstrate the behaviour of doping and to seriously consider removing the informal knowledge and comfort that all riders have in knowing that they will not be tested in the middle of the night.

Such a strategy would obviously not be universally welcomed. The Tour exists in a high pressured environment and one that is often subject to media and public comment. The UCI would need to accept that if it truly wishes to take the fight against doping to a new level it will not necessarily receive compliments from all riders and teams. Indeed, many people on the Tour and even those involved in anti-doping on the Tour have, at times, an unhealthy attachment to those competing, whether it is through personal friendships or just through having been involved in the Tour for a few years. This friendly culture may have benefits to the anti-doping programme but as detailed in this report can have the consequences of making the anti-doping programme overly rider-friendly and to the detriment of pursuing those who wish to cheat.

Overall, the anti-doping programme was executed well aside of one major non-conformance. In the view of members of the IO Team, no doping control programme is executed perfectly and this report highlights some areas where improvements were both recognised by the UCI and implemented or where improvements have been identified for future events. The major non-conformance occurred early in the Tour and related to a deviation from the required protocol when managing a partial sample. It is worth noting that once the UCI were made aware of this non-conformance corrective action was immediately implemented to ensure that this was only an isolated incident rather than a recurring issue. This reflected the commendable desire of the UCI to make ongoing improvements to the programme through the Tour.

There were a number of Presumptive and Atypical Findings reported during the course of the Tour, none of which resulted in a possible anti-doping rule violation. In addition, there was one Adverse Analytical Finding reporting after the end of the Tour which the IO Team is not in a position to comment further given this case has yet to be resolved. However, the IO Team did take some time to assess how this process has worked in the past and as set out in their rules and has made a number of recommendations in this area. Notably, it is the opinion of the IO Team that for such a high profile event in the sport of cycling, the UCI should be the default results management authority rather than delegating any sanctioning process to the National Federation of the individual charged, as is the current practice. This would ensure greater consistency in decision making and facilitate the speedy resolution of such results.

Lastly, the IO Team discussed the Code of Conduct which the ProTeams signed up to in 2004, but which seems to have been disregarded by both the ProTeams and the UCI. The IO Team is of the view that the UCI is highly unlikely to be successful in tackling doping in the sport of cycling without the active and committed involvement of the ProTeams and the value of reinvigorating the Code would have substantial benefits to the UCI, ASO, participating teams and clean riders. As a result this report recommends that the UCI should reinvigorate discussions regarding a Code of Conduct for ProTeams with the intention of establishing a mutually agreement Code before the next season of Grand Tours.

The IO Team would like to commend the UCI for implementing an anti-doping programme of such quality. We hope that the good practices implemented at the 2010 Tour, along with the recommendations in this report, will assist in the continuous improvements of anti-doping programmes both in cycling but also in other sports and their major events.

Scope of the IO Mission

The UCI and WADA signed an agreement in 2010 outlining the framework for the IO Mission for the 2010 Tour. The observation period commenced on 30 June (three days before the commencement of the Tour, which corresponds to the beginning of the in-competition period as defined in the UCI Anti-doping Rules), until and including the final stage of the race on 25 July 2010. The IO Team was comprised of two teams of three members (each team comprising a Chair, a member of WADA staff and one other)[1]. The first team handed over to the second team on 12 July during the rest day in Morzine-Avioraz, France.

The IO Team was granted full access by the UCI to observe all areas of the anti-doping programme[2], including:

- Therapeutic Use Exemption (TUE) procedures
- Test Distribution Planning
- Athlete selection
- Notification of doping control
- Sample collection procedures, both urine and blood
- Transport and chain of custody of samples
- Laboratory analysis[3]
- Results Management, including hearings[4]
- Administrative processes

The IO Mission implemented at the 2010 Tour was different than that previously conducted at the 2003 Tour. In 2003 the IO Team observed the anti-doping programme throughout the Tour and then published their observations in the final report a few months after the conclusion of the Tour. For this Tour, an audit style approach was applied. This allowed for regular communication and feedback between the IO Team and representatives of the UCI, which enabled the IO Team to gain an in-depth understanding of the UCI anti-doping programme and activities during the 2010 Tour. In addition to the daily observations, various members of the IO Team attended several meetings including meeting with the President of the UCI to discuss the arrangements for the Mission and a meeting of all the Team Managers, where the race logistics were discussed, prior to the start of the Tour. The communication channels were open at all times with the UCI and the IO Team was invited to contact the UCI immediately should any observations require immediate attention.

Recommendation 1: The audit style IO Programme should be the format used for all future IO missions. The daily communication and feedback between the IO Team and the respective anti-doping organisation allows for continuous improvement of the anti-doping programme throughout the event.

The IO Team tried to ensure that when observing aspects of the anti-doping programme and in particular the testing of riders, each IO Team member was assigned to observe a different part of the process each day. The overall strategy was to make certain that every aspect of the anti-doping programme was thoroughly observed and reported on.

---

[1] See Appendix 1 - Members of Independent Observer Team & UCI Personnel

[2] Given the nature of the IO Mission and the need for an independent report to be produced at the conclusion of the Tour, the IO Team did not actively purse media opportunities. In total one television interview was provided at the start of the Tour and three media enquiries which were directed to the WADA Communications Team in Montreal.

[3] The IO team did not observe the actual analysis of samples but rather was provided access to the analytical results through ADAMS of both the results from anti-doping tests as well as general profiling results

[4] The IO Team did not have the opportunity to observe the any hearings held as part of the result management process as none occurred during the period of the IO Mission

Each day the Chair of the IO Team provided an update on the IO Team's observations to representative(s) of the UCI. In the first half of the Tour this usually took place by phone given that the UCI representative(s) were not always physically present on the Tour. Where the UCI representative(s) were not present a follow up meeting took place later on in the day between the full IO Team, the Lead Doping Control Officer (DCO) and the other two DCOs to discuss some of the more detailed observations related to doping control and sample collection. It was noted that the Chaperone Coordinator did not attend these meetings and even further to a suggestion by the IO Team that he did attend, this did not happen with issues relating to confidentiality cited as the main reason.

For the second half of the Tour, a UCI representative was present on the Tour which was greatly appreciated by the IO Team. The IO Team arranged for a daily meeting to pass on observations and comments from the previous days testing and review of other areas. For the majority of days this meeting was held in the morning although in some instances due to early departures on some stages, the meeting was held in the Doping Control Station later that day or if comments were minimal were passed on by email or over the phone. Updates were provided solely and directly to the UCI representative.

The scope of this Mission also included a unique aspect not seen on any other IO Mission. On 12 May 2010, the Agence Française de Lutte contre le Dopage (AFLD) requested authorisation from the UCI to conduct approximately 60 additional tests during the Tour. The rationale for this request included the claim that the AFLD had access to confidential information from police, customs and other sources related to doping that it was not able to share with other private (ie. non-public) organisations such as the UCI. In response the UCI accepted it would perform a test if it received a request from AFLD; it did not need to know upon what the information the request was based. This solution however seemed to be unacceptable to the AFLD and as a result the AFLD further requested to conduct such testing but this time to WADA in keeping with Article 15.1.1 of the World Anti-Doping Code.

The situation was resolved through a WADA resolution[5] stating that should the AFLD have intelligence related to the Tour, they would firstly provide to WADA names (and relevant intelligence) of riders to target test who, after evaluation of the background information related to the request, would have the discretion to pass such request(s) to the IO Team. This channel of communication was used rather than going through the UCI to appropriately manage the issue of confidentiality. On receiving such information from WADA, the Chair of the IO Team would then ask the Lead DCO to conduct the specific target testing mission(s) only revealing the name of the rider at a suitable time[6]. The UCI were then advised of the details of such testing only once the testing had been completed.

The IO Team also note that the French community in Belgium acting as the National Anti-Doping Organisation (NADO) contacted the UCI regarding the ability to conduct additional testing in the French area of Belgium during the Tour, also in accordance with Article 15.1.1 of the World Anti-Doping Code. In this case, the UCI responded to the NADO outlining the number of tests to be conducted on the dates when the Tour was in Belgium, to which the NADO subsequently declined to request additional testing.

It is clear to the IO Team that there are a number of challenges to be addressed between the AFLD and the UCI. However, it is critical in the international fight against doping that International Federations and NADOs find ways in which to support each other's programmes.

Recommendation 2: Given the significance of the Tour to cycling and France, mediation talks should be scheduled as a matter of urgency between the UCI and the AFLD to establish how both parties might work closer together for the 2011 Tour. If either party is unwilling to engage in such talks then WADA should intervene and act as a facilitator to attempt to resolve such an impasse.

[5] See Appendix 2 - WADA Resolution

[6] See Section 'AFLD Testing via WADA Protocol' for further details

The Anti-Doping Team

Organisational Structure

The team of individuals ("the UCI Team") deployed to develop and execute the anti-doping programme for the Tour has grown over the years. Given the status of the Tour as a recognised UCI 'International Event' and the significant place the Tour holds in the public eye and for the sport of cycling, the UCI anti-doping programme has correspondingly placed greater significance on this event.

Planning for the Tour takes place many months in advance but for the purpose of the IO Mission there were four UCI staff members[7] involved in various aspects of the Tour's programme, ably led by the UCI In-Competition Testing Coordinator. The UCI In-Competition Testing Coordinator was supported in the field during the Tour (although not all at the same time) by the following individuals many of whom had previous experience of working on the Tour:

- 4 Anti-Doping Inspectors (DCOs) - appointed directly by the UCI
- 4 Medical Inspectors - doctors (and one nurse) appointed by the French Cycling Federation and the Italian Sports Medicine Federation (FMSI)
- 8 chaperones – employed by Ethique Sports Services (ESS) and contracted for the Tour by Amaury Sport Organisation (ASO), the Tour organiser

The UCI has a pool of approximately 40 DCOs who are appointed and trained to deliver part of its anti-doping programme, mainly during major cycling events and through some target missions in the out-of-competition testing programme.

In addition, there were three drivers, contracted by ASO, dedicated to the UCI Team who were relied on for transport to early morning and evening missions and to and from the finish line and hotels. A further driver was allocated to driving the Doping Control Station truck. Lastly, a security guard, also contracted by ASO, was responsible for the security of the Post-Finish Doping Control Station, including the entry/exit log. This resulted in a total of, at times, 20 people directly travelling with the Tour with the principle aim of supporting the anti-doping programme, as well as the staff at the UCI.

As mentioned previously, for a large part of the first half of the Tour the lead UCI representative, the UCI In-Competition Testing Coordinator, was regrettably not physically present with the Team but rather communicated with those on the Tour via telephone, SMS and email through the Lead DCO. In turn the Lead DCO coordinated the DCOs, Medical Inspectors, drivers, Chaperone Coordinator and the courier service. The Chaperone Coordinator was responsible for coordinating the team of Chaperones and also the security guard at the Doping Control Station. It should be noted that the IO Team was very impressed with the quality of work, dedication and passion for the programme of both the Lead DCO and the Chaperone Coordinator in their respective coordinator roles.

However, with so many people involved in the UCI Team, all with different professional and personal requirements and not having worked together as a group before, the organisational structure of the UCI Team was deficient. This is certainly not a reflection on the capabilities of the Lead DCO but rather a reflection of the size of the programme and time that the Lead DCO had available to deal with matters that in the context of the programme were insignificant but that were important to some individuals at specific times (eg. rostering team members so that they had some down time when anti-doping activity was not at its peak). This was compounded by the (in the view of the IO Team quite appropriate) tight control on confidential information and a seeming lack of team culture where individuals might have offered to help others more in times of need.

It is worth noting that the additional early morning and late evening testing requested by the AFLD did add to the administration and testing workload of the UCI Team. On occasion, the Team was required to start as early as 05.30 when testing riders in their hotels and finish as late at 23:30. It is also

[7] See Appendix 1 - Members of Independent Observer Team & UCI Personnel

noted that on some occasions the AFLD requests were communicated to the IO Team by WADA after 21:00 for testing the following morning which made the test planning difficult given the number of parties that had to be coordinated in such a short time. The IO Team, having acknowledged the difficulties, requested to WADA that all requests for testing late in the evening or the following morning should ideally be received by 19:00, unless in exceptional circumstances, to allow adequate time for the associated logistics to be arranged.

Following discussion between the IO Team and the UCI, the IO Team were advised that the matter of the UCI Team's management had been considered prior to the Tour at the UCI but that it had been decided that the UCI would coordinate the anti-doping programme remotely. This was in part due to the significant number of UCI events and in-competition testing delivered by the UCI on an annual basis. It is normal, and entirely appropriate, for DCOs to be provided with authority by the UCI to manage the UCI doping control programme at various cycling events throughout the world, recognising that it is physically impossible for a UCI staff member to be present at every event.

However, further to the IO Team's comments the deficiency was recognised and from Stage 11, the UCI In-Competition Testing Coordinator joined the Team on a permanent basis and took on the role of Team Manager. During the UCI representative's time on the Tour the Lead DCO continued to be the main coordinator of testing activities, reflecting the role he played in the first half of the Tour and his normal role at other major cycling events. The presence of a UCI representative was welcomed by the IO Team and was beneficial to the IO Mission in that it allowed the IO Team to gain a greater understanding of the UCI's programme and allowed for direct communication on almost all matters rather than over the phone or by email. It was also felt that having a UCI representative present added additional credibility to the delivery of the anti-doping programme during the Tour and that participating teams had a direct contact point with the UCI should they have any concerns. Most importantly, this arrangement allowed the UCI to oversee the testing sessions and the opportunity to audit the performance of the DCOs as part of quality control.

Recommendation 3: A member of the UCI anti-doping staff should be physically present for the duration of the Tour to act as liaison with the UCI office, Team Manager for the many people involved in delivering the anti-doping programme and to oversee all aspects of the anti-doping programme.

Chaperones

The Chaperone Coordinator played a vital role in coordinating the often complex task of the notification of riders and ensuring the team of Chaperones were well prepared for all testing on the Tour. ESS is a company that provides chaperoning services in France for a variety of events and sports and are contracted by ASO for the Tour. The Chaperones were therefore very experienced and some of them had already worked on previous Tours. Despite being experienced, the UCI conducted a training session with the Chaperones under the supervision of UCI anti-doping staff prior to the start of the Tour. All Chaperones had signed two confidentiality agreements, one with EES and one with the UCI. Aside of comments made later in this report, the IO Team found the Chaperones professional and highly competent.

The biggest concern that the IO Team observed issue with respect to the team of Chaperones was the location of their accommodation, in that they rarely staying in hotels in close proximity to the rest of the Team or indeed the hotels of the riders. On one occasion it was noted that the Chaperones were required to drive (they did not have drivers) a 250km round trip for early morning testing. While this was at the extreme end of the issue, the remote distance of the Chaperones placed greater pressure on both the coordination of the testing and the amount of time the Chaperone team were travelling.

Recommendation 4: The Chaperones should be located in the same (or as close as can be accommodated) city or village as the DCOs and Medical Inspectors so as to enhance the ability of the Team as a whole to react quickly and effectively to test missions both early morning and late evening.

In terms of accreditation the Chaperones received an accreditation pass by ASO with the title Chaperone and access to the course and press areas. It was noted that the Chaperones did not carry a letter of authorisation from the UCI in accordance with Article 5.3.3 of the International Standard for Testing. This was brought to the attention of the UCI representative and a letter of authorisation was quickly developed which was then issued to each Chaperone.

Lastly, on a few occasions during the difficult task of waking up riders early in the morning, the Chaperones were insulted by some riders. Chaperones are anti-doping officials and should be offered due respect for their role in the doping control process. While one can understand that a rider is upset to be woken up early in the morning, it is not acceptable that they insult anti-doping officials.

Recommendation 5: Chaperones should be reminded at the start of the Tour of the formal UCI process for registering inappropriate behaviour so they are equipped to deal with such situations.

Doping Control Officers

Led by the Lead DCO, the DCOs were generally efficient in their execution of the sample collection process and were experienced in the unique aspects of cycling. The team of DCOs spoke English, Spanish, Italian and French which was very beneficial given the various nationalities of riders competing in the Tour.

One interesting aspect of the DCO arrangements is that UCI DCOs tend to start their 'career path' firstly as a Commissaire (ie. a race official) and then progress towards being a DCO in the later stages of their UCI career. It is important to note that the relationship a Commissaire has with the riders is a different one to that expected when working in anti-doping. Specifically the anti-doping role is a very objective and independent role while the role of Commissaire arguably relies more on having an integral understanding of the sport and the behaviours of the riders/teams on the course.

It is difficult to substantially change that relationship (and the riders' view of the relationship) when the role changes (even from one event to the other, with only days or weeks apart) and this on occasion led the IO Team to observe a sometimes too comfortable relationship between the rider and DCO. That is not to say that the rider-DCO relationship should not be one of mutual respect. Indeed in the environment of the Tour when riders are being tested more often than in the vast majority of sports and where the DCOs also conduct out-of-competition tests on these riders throughout the year, it is to the credit of the DCOs that they worked hard to find the balance of friendliness and official distance and to assert their authority on the few times they needed to. However, on several occasions some DCOs referred to their friendship with the riders and the team officials and made comment to the IO Team that the riders should not be tested too early or too late as they needed to rest and that such testing tactics could "threaten" their friendship with the riders. That said, the IO Team were advised that a new strategy for the recruitment of DCOs has been put in place which is expected to establish the career pathway of DCOs more clearly for the future.

Recommendation 6: The UCI should consider the implications of using retired or active Commissaires as DCOs and if they continue with this practice ensure that specific training acknowledging the different relationship is provided so as to ensure that the right balance of comfort, authority and independence is present during doping control.

Further, it is to be mentioned that the work of a DCO during the whole Tour is very demanding, both physically and psychologically. This is particularly true for the Lead DCO, who was responsible for the daily management of pre- and post testing administration. For this reason, the IO Team was quite surprised to learn that the Lead DCO had no planned rest days. As a consequence, he had to work 25 days in a row at an unforgiving pace. In contrast the DCOs and Medical Inspectors had an informal rotations system in place as did the Chaperone Coordinator to ensure that most of the UCI Team benefited from a rest day from time to time, while the Medical Inspectors were replaced half way through the Tour.

Recommendation 7: The UCI should ensure that the staffing roster for anti-doping personnel includes sufficient pre-arranged time off from both testing and administration so as to allow for the work demands on the Tour and to keep personnel 'fresh'.

Medical Inspectors

In accordance with Article 127 of the UCI Anti-Doping Rules ("the UCI Rules") a Medical Inspector is appointed and responsible for witnessing the provision of urine samples and to collect blood samples. The Medical Inspector is required to be a doctor but is able to appoint other persons (qualifications not stated) to assist in sample collection. Further, the UCI Rules states that Medical Inspectors should be appointed by the 'organizer's National Federation'. In the case of the Tour this was not exactly the case with one Medical Inspector appointed by the Italian Sports Medicine Federation. The IO Team recognises that for events of less magnitude than the Tour this is a practical means of ensuring that sufficiently skilled personnel are made available for the collection of urine and blood. However, for the Tour the IO Team believes that it is essential that those involved in the anti-doping programme need to have a comprehensive understanding of cycling, the skills to fulfil their role and experience in events of a large scale. By delegating the responsibility of the appointment of the Medical Inspectors the UCI was reducing its ability to ensure that those responsible for sample collection on the Tour were of a sufficient quality. This risk is also increased by the fact that the Medical Inspectors were replaced on a number of planned occasions during the Tour, due to the time commitment required.

Recommendation 8: The UCI should take full responsibility for the appointment of Medical Inspectors for major UCI events so as to ensure that sample collection personnel have the required skills, qualifications and experience in anti-doping and are bound by suitable confidentiality agreements.

That said, overall the quality of the Medical Inspectors was of an appropriate standard with one isolated negative observation where a Medical Inspector was sent home due to his performance when drawing blood. This incident arose during an early morning mission where the Medical Inspector did not insert the butterfly needle into the rider's vein correctly, causing some discomfort for the rider. At this point the rider's team doctor asked the Lead DCO if the team doctor could collect the blood of the rider, to which the Lead DCO agreed. This was duly noted on a supplementary report form. The Medical Inspector was subsequently sent home and a new Medical Inspector was quickly recruited by the UCI as a replacement.

The majority of the Medical Inspectors were not DCOs so their roles were very distinct and at times it was felt that this resource could have been utilised more effectively by including the Medical Inspectors in some of the more administrative procedures that DCOs are required to complete with the sample collection process. This was particularly true for the Medical Inspectors from Italy who were trained and worked as a DCO/BCO on a full time basis but was not utilised in this role for the Tour.

Finally, as with the Chaperones, a letter of authorisation was not provided for the Medical Inspectors to validate their authorisation to witness the collection of urine samples and to collect blood samples on behalf of the UCI during the Tour.

Communication

The UCI Team all attended a UCI briefing on 30 June in Rotterdam prior to the start of the Tour. Each day the DCOs and the Chaperone Coordinator would have a brief meeting in the Doping Control Station to discuss the testing of the previous day and any issues that arose. The Chaperone Coordinator then passed any specific information immediately back to the Chaperones so any adjustments could be made. While the IO Team did not observe this, it was apparently common practice for the Chaperones to discuss their next day's duties and any issues that arose at the end of each day.

In addition, the DCOs and the UCI representative held a brief meeting about one hour out from the finish of the stage in the Doping Control Station to discuss any issues from the previous day or morning missions and comments from the IO Team. The DCOs also debriefed at the end of the post

race testing. The IO Team acknowledge that due to the logistics of the Tour it is not always possible to have everyone staff member in the same room and the process observed was satisfactory.

Recommendation 9: Where the Chaperones, DCOs and Medical Inspectors are required to work so closely together and where the success of the testing programme relies on all working in an integrated manner, a formal daily briefing/debriefing session should be put in place.

Venues & Equipment

Doping Control Station

The Doping Control Station ("the Station") was a purpose built truck provided by ASO which had a dedicated driver (appointed by ASO) who drove the truck on a daily basis to the finish line of each stage. The Station was always located close to the finish line beside the protocol and press areas and was contained within a perimeter of fencing. The single point of entry was protected by the security guard. Signage was generally very visible.

The Station itself was designed to include a small waiting corridor with seating for four persons (two riders and two rider representatives), a small TV and fan. This part of the truck could move in and out on rails powered by a hydraulic system and provided additional space for testing, however it was a little cramped for access in and out of the processing rooms. The main body of the truck contained two processing rooms divided by a sliding door. Each room had a fridge, a table, two chairs, a bench seat, several cupboards, a sink, air conditioning/heating, a small TV, radio/CD player and a toilet cabin with one side (facing the processing table) made of glass for witnessing the provision of urine samples. The processing room provided just enough space for the DCO, Medical Inspector, rider, rider's representative and a member of the IO Team. The IO Team was impressed with the functionality of the Station which ensured that the required facilities were private, comfortable and appropriate for the Tour. The riders were also used to the Station which assisted in ensuring the sessions were conducted efficiently.

Recommendation 10: Due to the tight nature of the processing rooms and the need to ensure that sample provision is observed adequately, mirrors should be put up on the two solid toilet walls at an appropriate height to facilitate observation by the Medical Inspectors.

Perimeter Fencing

The perimeter fencing surrounding the station was constructed of 2m high and wide metal fence panels with metal bars running vertically about 10cm apart on each panel. The waiting corridor was very small so the riders, when arriving together were generally required (and seemed to prefer) to wait outside. However, the fence panels did not provide the riders with any privacy so as they waited to provide a sample they could easily be seen through the panels. On a number of occasions large numbers of media seeking interviews and on some occasions fans seeking photos and autographs of the riders could be found around the perimeter fence. Following feedback from the IO Team, in order to offer some protection from the sun and rain, a tent was requested by the UCI which arrived a few days after the Tour departed Rotterdam. However, a similar suggestion to cover the perimeter fencing with fabric, in order to protect the privacy of the riders, was not adopted.

Recommendation 11: As an extension of the waiting area a tent should become a standard feature of the Station for all future events were the truck is used for doping control. In addition, the perimeter fencing surrounding the Doping Control Station should be covered with a type of fabric designed to provide the privacy for the riders selected for testing (with consideration given to using the fabric space to promote clean sport).

Signage & Positioning

The signs that identify the Station area as "contrôle antidopage" were very visible and positioned at the gate entry point to the Station. It was noted that in the Tour roadbook this area was designated in the plan of arrival zone (page 15) as "Contrôle médical".

The Station area was usually well placed although on occasion the Station was too close to the finish line which meant that after the riders finished and rolled through to the Post-Finish area the riders with their Chaperone then had to turn around and go against the flow of oncoming riders and media

to enter the Station area. At times this was quite dangerous given the amount of riders crossing the line at speed and the excessive number of people in this area.

Recommendation 12: Where possible, the Doping Control Station area should be located towards the mid-point between the Finish Line and the end of the secure Post-Finish area for accredited people to assist with the flow of riders to doping control.

Equipment

The UCI provided all the sample collection equipment for testing. This included the Berlinger urine kits, collection vessel and partial kits along with the Berlinger blood kits (both the EDTA 3ml vacutainers for collection of whole blood and the 5ml yellow vacutainers for separation of the whole blood and serum).

Refractometers were also provided for the measurement of specific gravity. However they were found to be faulty in the early part of the Tour and were discontinued without being replaced, but rather urine litmus strips were then used to determine if the sample met the specific gravity requirements. It was noted that one of the Medical Inspectors used his own personal refractometer to measure specific gravity during the testing sessions in which he was involved.

Test Distribution Planning

The overall Test Distribution Plan (TDP) was established in advance by the UCI with all testing being deemed to be in-competition tests[8]. In general terms the TDP included 8 Post-Finish tests per day with the Stage winner and the holder of the Yellow Jersey automatic selections and 6 further tests either drawn randomly or targeted using intelligence from the UCI. In addition on selected days unannounced testing[9] was conducted in the evening and the morning for the purposes of target testing. Lastly, three days before the Prologue, all riders were provided with advance notice to provide a blood sample for the Athlete Biological Passport (ABP) programme. The total number of samples collected during the Tour was 590[10].

Pre-Tour Testing

During the period of April to June 2010, the UCI conducted a substantial testing programme[11] where a total of 1025 samples were collected, both in-competition and out-of-competition. Of these 22 were anti-doping blood samples, 597 blood samples for the purpose of the ABP and a further 406 urine samples. The results of the ABP tests conducted as well as the performance of each rider during this period was analysed by the UCI and resulted in the selection of 54 riders for more targeted testing before the Tour. ASO made a significant financial contribution to testing both before and during the Tour, demonstrating the desire of the organisers of the Tour to tackle doping at the Tour in cooperation with the UCI and recognition that effective testing must also include out-of-competition testing in advance of such events.

Recommendation 13: The good practice observed whereby the event organiser (in this case ASO) financially contributes to testing prior to their event be continued and the UCI and other International Federations consider such relationships with other major event organisers to support testing programmes in the lead up to the respective major event.

Athlete Biological Passport Programme

From what the IO Team observed on the Tour, the ABP could have an even more significant impact on the execution of the UCI's anti-doping programme, if used to greater effect.

Having implemented this programme two years ago the UCI has access to a variety of blood parameters for each rider which forms what is known as the rider's blood profile. Where this differs from previous versions of a passport programme, the UCI's programme is able to establish the norm of the measured parameters for each individual rider after a number of samples have been collected. If atypical or abnormal readings are observed then the UCI is able to react by target testing or in some instances charge a rider for the 'use' of prohibited substances and/or methods.

For the Tour ABP samples are sent to the Lausanne Laboratory in anonymous format, the results of which are then statistically analysed by the Athlete Passport Management Unit (APMU) and sent to the UCI and the experts if necessary During the major Tours the AMPU in turn provides a commentary to the UCI regarding all of the riders' profile identifying whether the profile was suspicious (using a 10 point scale with 10 representing the highest priority for testing and 1 the least) as well as recommendations as to the type of test to target the rider. The data that the UCI

[8] The UCI Rules define the in-competition period for major Tours as three days before the day of the start of an Event and finishing at midnight of the day on which the Event finishes

[9] For the purpose of this report, the term 'unannounced testing' or 'unannounced mission(s)' refers to all in-competition testing conducted during the Tour which was not deemed to be part of the Post-Finish TDP

[10] Details of the Tour testing programme can be found at Appendix 3

[11] Details of the pre-Tour testing programme can be seen at Appendix 3

[12] One example of this was the arrival of a rider at the Station at the conclusion of a stage who assumed that because of his position in the race he would be required for testing, whereas in fact the UCI had not identified him for testing.

holds on each rider is hugely valuable in informing an intelligent testing programme. It is clear that there are very few Anti-Doping Organisations that have such intelligence to hand and the UCI should be congratulated on the ABP programme and the benefits it brings to their programme and the world of anti-doping. Members of the IO Team were very grateful to receive this highly sensitive information.

For the Tour, the UCI collected 198 ABP samples immediately prior to the Tour in Rotterdam with the aim to establish the most recent blood profile of each rider. Throughout the Tour an additional 124 ABP samples were collected across seven different days providing the UCI with the current profile on certain riders. The time taken from the collection of the ABP sample until the results from the APMU was noted in some situations to be up to ten days, although initial information used to target test was generally provided within 2-4 days post collection. The IO Team was provided with a copy of the communication between the laboratory and the UCI with the Laboratory's commentary on three occasions during the period of the Tour.

Recommendation 14: The UCI should continue to invest time and money in the Athlete Biological Passport (ABP) programme as it has the potential to radically change the way the UCI (and other Anti-Doping Organisations) conducts its anti-doping programme.

The IO Team observed that the ABP data is made available on ADAMS within a short period after the analysis is completed. The aim of this is to allow the testing authority to react rapidly when an atypical and/or abnormal result is received. However, in referring to the Guidelines for Biological Passport Programme there is no mention about the actual time to report this data. Also the WADA Guidelines specify that data from the ABP should be available on ADAMS with access to both the anti-doping organisation and the rider concerned.

The IO Team's understanding of the Guidelines is that data does not necessarily need to be available to both parties (ie. the anti-doping organisation and the rider) immediately after the analysis is completed. The data could be sent to the UCI first followed by the recommendation from the APMU which the UCI could then act upon and conducted a target test of the rider if there are suspicions. When sufficient time has passed and if needed, a follow up test conducted, the data could then be released on ADAMS, with access to the rider concerned. This would minimise the possibility of riders being aware of possible follow up testing and/or then having the ability to manipulate their blood profiles after accessing such data and before a follow up sample can be collected.

Recommendation 15: The UCI and WADA should consider the timing of releasing ABP date to riders to ensure that the UCI has time to review and act accordingly on any profiles that warrant further investigation and/or testing prior to the rider being afforded the same opportunity to look at their own profiles.

Rider Selection

According to Article 175 of the UCI Rules, UCI may designate the riders to be tested in an event and instruct the DCO accordingly. Failing such instructions, the DCO shall test the riders as designated in Appendices 2 and 3 of the Rules. According to Article B. IV of Appendix 2, for stage races the following four riders shall be selected for testing at the end of each stage:

1) Winner of the stage
2) Leader of the general classification after the stage and
3) Two riders selected at random by the Inspector [the DCO]

After the Prologue (the first day of competition), nine riders provided a urine sample. The UCI had first decided to test the leader and seven targeted riders. However, for the Prologue the provisional leader of the classification remained under Chaperone's scrutiny until the earlier of i) another rider became the new provisional leader ii) the end of the race. It was agreed that if the provisional leader could not wait and needed to provide a sample, he would be formally notified, provide a sample and then would be allowed to leave the Station. This is precisely what happened and therefore a total of nine riders were tested at the Post-Finish of the Prologue.

For the regular stages, the UCI had decided to test the stage winner, the leader of the general classification, as well as six targeted or randomly selected (drawn) riders. This practice was generally well known by the riders and their teams. For the vast majority of stages, the UCI selected six riders per stage to be target tested in addition to the winner of the stage and the general classification leader. Where the stage winner was also the leader of the general classification, regrettably no additional tests were conducted, although it was observed that where the leader of the general classification had been such for a number of days the UCI appropriately revised their TDP to test another jersey winner rather than the leader of the general classification a further time.

In addition to the Post-Finish testing, the UCI conducted unannounced tests in the morning and evening on riders, all of which were targeted based on the intelligence the UCI held through the ABP. This testing usually took place at 07.00 and 19.00.

AFLD Testing via WADA Resolution

As previously mentioned, an additional element of target testing was in place where the AFLD would pass intelligence to the WADA office in Montreal, the intelligence was analysed and if deemed appropriate the WADA staff member on the IO Team was informed of the name, preferred time and analysis of a test. To preserve the confidentiality of such testing the Chair of the IO Team then contacted the Lead DCO, requested a specific number of DCOs, Medical Inspectors and Chaperones and advised them of what time and where to meet in advance of the test. Only when the DCOs, Medical Inspectors, Chaperones and IO Team member arrived at the team hotel was the name of the team and rider revealed. From this point on the test was conducted as per the UCI procedures with the UCI advised of the details of such testing only once the testing had been completed. This happened on 9 occasions during the Tour and involved a total of 33 missions consisting of blood and urine samples.

While this system worked well, the biggest challenge the IO Team had was that in such circumstances the role of the IO Team changed from being observers to playing an active role in the anti-doping programme for the Tour, and thereby involved an element of decision making. This is clearly evidenced here where the IO Team is effectively reporting on its own activities and delivery of a test plan at the Tour. On a number of occasions members of the IO Team were required to act as testing coordinators given that at a particular point in time the IO Team were the only holders of the UCI's TDP and the information from the AFLD via WADA. The IO Team tried to take advantage of this privileged position and on one occasion advised WADA that the tests being requested could not be completed as the UCI tests should be given priority (on the basis that they were target tests with equally good justification) and on another occasion the IO Team, knowing the names of the AFLD tests, recommended to the UCI (without divulging the identity of the riders) that ABP samples should also be collected, to which the UCI confirmed their acceptance.

This procedure was new to both the IO Team and the UCI and therefore required some initial fine tuning. As a result there were some initial difficulties encountered whereby the IO Team did not request Chaperones for an early morning test, omitting to appreciate that the usual procedure was for a Chaperone to notify a rider while the DCO and Medical Inspector sought a suitable sample collection room in the hotel of the rider. In addition, it was also not considered how the samples would be transported as the IO Team assumed that World Courier would have a regular pick up point for morning samples and when the AFLD tests were the only ones conducted one morning an emergency call was required to ensure World Courier could transport the samples in the required time. The last process required to be modified was the transmission of the test details from WADA to the IO Team. Initially the requested tests were not detailed enough which created some confusion. All of these matters were quickly rectified.

Recommendation 16: The route of passing intelligence via WADA to the IO Team should be used as a last resort with the ideal means by which such testing should be conducted being through a direct relationship between the respective National Anti-Doping Organisation and International Federation.

The majority of the test missions requested by the AFLD were conducted in the early morning with two missions conducted in the evening and two further riders tested after a particular stage. This additional testing placed considerable time commitments on all staff involved as not all of the UCI Team stayed in a single location and following such testing the same individuals then had to travel to the finish line (usually in excess of 200km) to complete the Post-Finish testing before travelling to a new hotel (up to 90km away from the finish line).

Recommendation 17: The UCI should consider the appointment of additional DCOs and Medical Inspectors to the Tour to allow for two teams to work separately on unannounced and Post-Finish testing.

It is to be noted that the IO Team found the intelligence provided by the AFLD to be of a generally accurate nature and consistent with riders that the IO Team and/or UCI deemed to warrant target testing. This reinforces the opinion that this lack of direct cooperation between the UCI and AFLD undermines the delivery of an efficient doping control programme during the Tour.

Testing Strategy

In the IO Team's opinion, given that it is believed that some riders are transfusing blood and micro dosing erythropoietin (EPO) in an effort to maintain consistent blood parameters for their profiles, the greatest chance of detecting doping through analytical methods during the Tour would be by conducting EPO analysis on urine. In turn the best time to detect EPO based on the assumed habits of doping riders would be very late in the evening, early in the morning or if current thinking is correct in Post-Finish testing on the basis that exercise stimulates analytical peaks in EPO use. Such a programme may be supplemented by a variety of other substances including human Growth Hormone, synthetic testosterone, Continuous Erythropoietin Receptor Activator (CERA), Haemoglobin Based Oxygen Carriers (HBOC) and Homologous Blood Transfusion (HBT). It is recognised that early morning or evening testing needs to balance the fact that the Tour is very demanding and sleep and rest are very important for riders. It should also be recognised that the collection of ABP samples, rather than standard in-competition screens, during the Tour could be significantly valuable in the more long term efforts to detect those who choose to dope.

Based on these assumptions, at the start of the Tour the IO Team felt that the timing of testing remained too predictable[12] and that the Post-Finish testing was weighted too heavily compared to that of the early morning and late evening missions. Given the level of such intelligence available, a greater balance should be found between unannounced and Post-Finish testing. The IO Team had the feeling that there was no surprise for the riders with respect to the TDP. For example, the IO Team initially noted that the unannounced missions were almost expected as they only took place before difficult stages (prologue, mountain stages) and on rest days. When challenged, the UCI explained that it is in their opinion there was little reason to test in the morning of stages which the UCI deemed to be easier.

After a few days of the Tour, the IO Team discussed this with the UCI and as with many areas for consideration raised by the IO Team, the UCI responded in a positive way and the IO Team observed a visible increase in the number of target testing both unannounced and Post-Finish. However, after analysis of the final testing statistics, it is noted that when the ABP missions are excluded, the percentage of unannounced testing is only approximately 15%, the majority of which were AFLD testing. The IO Team sees no reason why the unannounced percentage should not be significantly higher.

On detailed examination of the ABP data, the Laboratory's recommendations and the UCI's testing response to such data, it is the IO Team's impression that the UCI could and should have executed a more targeted and aggressive testing strategy. Examples of this are as follows:

[12] One example of this was the arrival of a rider at the Station at the conclusion of a stage who assumed that because of his position in the race he would be required for testing, whereas in fact the UCI had not identified him for testing.

- While recognising the high level of testing and a focus on targeting riders in the Pre-Tour period (i.e. April to June 2010) it was noted that there were a number of riders of significance who took part in the Tour who had either not been tested during the Pre-Tour period or who had only been tested once (with the majority of these for the ABP).

- During the Tour, a number of riders demonstrating suspicious profiles and/or showing significantly impressive performances at the Tour were tested on surprisingly few occasions and for three riders of interest did not provide a blood sample for the purposes of anti-doping in the whole Tour (instead each providing a single sample for the ABP). This was consistent with the IO Team's view that at times more weight was given by the UCI to ABP samples than samples for the detection of the 'presence' of prohibited substances and/or methods.

- The IO Team was surprised to see that a random draw was conducted for Post-Finish testing on two stages. The IO Team did question the rationale of even conducting a random draw, and while recognising that the particular stage was a flat one (which usually finishes in a bunch sprint), it seemed a missed opportunity not to use the intelligence available to the UCI or even base the selections on the performance of the riders in the stage. This was considered by the UCI after the first random draw was conducted and the IO Team only observed one further random draw being conducted again on the Tour.

- A rider identified as having a priority index of eight (with ten being the highest and most at risk of doping) was tested only once (urine EPO) during the Pre-Tour period with no blood sample collected for the analysis of CERA, HBT, HBOC or other prohibited substances and/or methods. During the Tour recommendations from the Laboratory related to target testing for EPO did not seem to be conducted expediently or as appropriate (ie. the EPO test was conducted 6 days later while the blood sample was only analysed for hGH). Lastly, following a significant delay in providing an early morning sample and in conjunction with the intelligence already held on this rider, there seems no evidence of more intense target testing on this rider.

- For a rider identified as having a priority index of ten, no blood samples were collected following the Laboratory recommendations after interpretation of blood passport data from the first week of the Tour, with only urine being collected and no blood as recommended by the Laboratory. Further, a recommendation to target test the rider for EPO took seven days to be executed.

- A rider identified as having a priority index of ten was not tested for either urine or blood from 3 April to the start of the Tour. Recommendations made by the Laboratory following testing in the first three days of the Tour resulted in no further blood samples being collected but rather only urine and approximately ten days later. The IO Team became aware of the remarks made by the laboratory regarding the analysis of this rider's specific sample that raised the suspicion of the use of proteases. No further information regarding any actions taken by the UCI for further analysis of that sample was made available.

- For a rider identified as having a priority index of eight, who was recommended to be target tested for EPO by the Laboratory, the UCI did not target test the rider and in addition a sample collected five days later was not analysed for EPO. Interestingly in this case collection of follow-up samples from this rider was initiated by the AFLD via the WADA Resolution.

- Given the challenges in organising and resourcing unannounced missions, the IO Team would have expected to observe multiple riders being targeted for morning and/or evening testing. However, it was observed that when a single rider was targeted there was no consideration to testing additional riders either from the same team as the targeted rider or from teams also residing in the same hotel.

Before any conclusions are made with respect the UCI's testing strategy the IO Team would like to reiterate that the UCI's ABP is an excellent programme and one the UCI should be proud. However, in the opinion of the IO Team, the UCI now needs to take the next step in designing and executing a testing strategy that is radically different to those executed in the past. This will take the sport, riders

and teams some time to get used to but the IO Team is of the firm view that clean riders expect the UCI to take whatever steps are necessary to tackle doping in their sport and over time will respect the UCI for a more aggressive approach.

Recommendation 18: With the amount and high quality of intelligence available to the UCI, it is critical that in the future a more varied, targeted and aggressive approach to catching cheating riders be a priority for the UCI. This should include, but not be limited to, increasing the number of anti-doping tests (rather than ABP), testing in less acceptable hours with a greater chance of detecting substances and/or methods with short detection windows and significantly limiting the use of a random draw so that all testing is based on intelligence and/or performance during the race (or at least test history prior to making random selections).

Analysis Type

With respect to the type of testing conducted it was interesting to note that when the riders were present the UCI did not take full advantage by collecting more sample types. As with any event, there was a variety of analytical screens that could have been identified but the majority of Post-Finish tests were urine tests (usually including EPO analysis) with very few blood samples collected.

Based on the nature of the Tour, riders may seek to gain advantage mainly with the use of prohibited substances and/or methods that increase their endurance performance. It was therefore expected by the IO Team that EPO would be the principal substance to look for by the Laboratory. It is noted however that only 70% of the UCI's analysis were for EPO, and it was outlined that the budget was the main constraint for not doing more EPO testing. Moreover, only a reasonably small number of blood samples were collected for analysis for CERA, HBOC or HBT and it is unknown to the IO Team how many (if any) blood passport samples were later analysed for any of these substances.
There are also new substances and/or methods that can now be detected or suspected, yet the UCI only sent ten target test samples to the WADA-Accredited Laboratory of the German Sports University, Cologne, for additional analysis for new substances and/or methods. As a way of illustrating this, during the Tour it leaked in the media that the authorities of the country of one of the competing riders had just initiated an investigation against the rider to examine doping allegations. Information which appeared on the media linked the rider with the use of a new drug, which is prohibited in sport. The IO Team did not observe any attempt to target test this rider for the new prohibited substance.

Recommendation 19: Target testing should always include an assessment of the various analyses the laboratory is able to conduct, including those 'new' to sport. During the Tour screens should routinely include EPO analysis.

Lastly, the IO Team noted that 25 samples had an IRMS analysis performed on them during the Tour. While it is acknowledged that the matrix for a Steroid Profiling Programme are still in development, studying such data may highlight some areas of concern and the IO Team would suggest that given that steroid profile data is available from the laboratory that such data could be collected and analysed for a select group of riders to monitor any specific changes within the steroid profiles.

Recommendation 20: To further develop their intelligence capabilities, the UCI should consider the benefits of implementing a Steroid Profiling Programme.

Communication & Confidentiality

For a TDP to be targeted it relies on the confidentiality of such information to be communicated in a secure way. This was initially achieved by the UCI In-Competition Testing Coordinator communicating the names of riders to be tested directly to the Lead DCO, who in turn coordinated the sample collection sessions and verbally advised the Chaperone Coordinator accordingly. In the first instance communication between the UCI and Lead DCO was done through SMS the day of the testing (or if evening and morning testing in sufficient time to organise the DCOs, Medical Inspectors and Chaperones).

Following discussion with the IO Team regarding the security of this system, a modified approach was implemented whereby a random number was assigned to each rider which was only shared by the UCI In-Competition Testing Coordinator with the Lead DCO and from then on the TDP was transmitted via SMS with reference only to the random number which was then referenced by the Lead DCO in advance of testing. This system provided an extra layer of security and worked well for the Tour. It should be noted this was a good example of the desire of the UCI to continually improve their programme and to try new approaches during the Tour.

Recommendation 21: The UCI should continue to use a secure method of transmitting the TDP and further investigate the feasibility of encrypted communications should the UCI be required to transmit the TDP remotely.

Secondly, when testing occurred in a team hotel and a team representative (either from the team being tested or another team) questioned whether any other of the team riders are scheduled for testing the answer provided should be one of 'no comment'. On one occasion, the DCO answered such a query with "no", which is in the view of the IO Team inappropriate and provides too much information.

Recommendation 22: DCOs should not disclose whether other riders are scheduled for testing during the same mission or that day as this information is confidential and carries a strong deterrent effect.

Notification & Chaperoning

Pre-Competition

On selected days unannounced testing was conducted in the morning and evening for the purposes of target testing. The following details the notification processes and relates to both tests conducted directly by the UCI and those tests initiated by AFLD as a result of the WADA Resolution.

To conduct successful pre-competition testing, cooperation between the DCOs, Medical Inspectors, Chaperones, drivers and World Courier was required. The distance between the hotels of these individuals and the hotels of the teams of riders was to be taken into account as was the confidentiality of the TDP with only certain groups advised of the team and riders name in advance. In order to ensure no-advance notice testing, pre-competition operations were required to be discreet and fast and the arrival of the persons involved coordinated so that they arrived at the same time. It was clear to the IO Team that it was well known to the teams that the arrival of the UCI Team could be observed by checking the hotel car park. On two occasions, the IO Team could clearly see two persons watching the parking from their room windows half hidden behind the curtain as well as a team member seated in front of the hotel who immediately used his mobile phone when he saw the UCI Team. There could have been an innocent explanation for this but it was evident that for unannounced testing to be effective the need for a speedy and discrete entry to the hotel was of paramount importance, due to the potential for samples to be manipulated over a short space of time.

Recommendation 23: Where possible, for unannounced testing the anti-doping team arrives in a car which has no references/branding of the Tour and is not easily identified as such. Also, DCOs, Medical Inspectors and Chaperones should be encouraged to wear "normal", non-Tour clothes and instead use their ID cards as a means of identification to hotel reception and staff.

The Chaperones travelled in two vehicles provided by ASO and were responsible for driving the vehicles themselves. When the IO Team received a request from WADA for AFLD target tests the Lead DCO was advised of the number of staff required and the meeting point. The majority of the time the Chaperones met the DCOs and Medical Inspectors at the hotel of the DCOs, although on occasion the Chaperones met the DCOs and Medical Inspectors on route or at the designated hotel. Initially the DCOs, Medical Inspectors and Chaperones met in the hotel car park and then received their instructions. However this was later changed so that all parties receiving instructions shortly prior to arrival at the hotel in order that paperwork could be prepared and a quick entry into the hotel could be made.

Recommendation 24: When conducting early morning or late evening testing that the DCOs, Medical Inspectors and Chaperones, wherever possible, have all the information in advance of arriving at the mission location and all documentation prepared so that they can enter the hotel immediately on arrival and proceed straight to notify the selected riders.

Once the Chaperones were in the hotel they went straight to the lifts to determine if the team had provided a team rooming list. The team list was for the large majority of teams placed right next to the lifts and outlined the room numbers of the riders, the doctor and team manager. This assisted the Chaperones and DCOs in their notification duties. On only a handful of occasions where this list did not exist, the hotel reception was requested to provide the team list or the room of the rider/team doctor. In such instances the hotel provided this information without any problem and it seemed like they may have been briefed to do this when requested by a DCO. It was noticed that those teams who did not display or make available a team list with the riders' room numbers were always the same and it was unclear as to what UCI obligation if any is placed on teams to comply with this helpful and cooperative practice.

Recommendation 25: The provision of team room lists continues and the UCI to make it mandatory for teams to provide a detailed team rooming list for UCI officials, at a minimum at the hotel reception desk.

Once the room numbers were known, the Chaperones were fast in arriving at the room and notifying the riders. When not allowed to enter the room, they ensured direct eye contact was maintained by having the door opened or ajar and then brought the rider to the room where the testing would take place. On all but a few occasions it was observed that the Chaperones went straight to the selected rider's room number and knocked on the door. On other occasions the DCO went directly to the team doctor's room to wake him first and then proceeded to the riders' respective rooms. The International Standard for Testing makes it clear that the rider shall be the first one notified for testing except where required to help the DCOs and/or Chaperones identify and notify the athlete to be tested. This was communicated to the UCI and it was agreed that at all times contact should firstly be made directly with the rider and only then with the team doctor.

Recommendation 26: Chaperones/DCO's proceed straight to the riders' room and notify the rider and only then proceed to the team doctor's room and advise him of such testing. The procedure should be explained to the Teams in advance of the Tour in order to avoid any adverse reactions and comments from the team doctors.

On one occasion a Chaperone knocked on a room containing two riders who were sleeping. Both riders got up and started to get dressed although only one was selected, with the first rider out of the room not actually the rider selected. However, he proceeded to sign the notification form and went to the temporary processing room with the Chaperone. On arrival at the processing room the DCO identified the rider as the incorrect rider to the one required. At this point the correct rider appeared at the processing room without a Chaperone. The first rider became upset and started shouting about language problems and proceeded back to his room to go back to sleep. The rider incorrectly notified had his notification form torn up and a new notification form was prepared for the correct rider who proceeded to complete the test. Such a situation could and should have been avoided by the presentation of photographic identification at the time of notification.

On another occasion a Chaperone failed to get the selected rider to sign the notification section of the Doping Control Form prior to arrival to the temporary processing room at a hotel and handed over the Doping Control Form to the DCO (without making comment to the DCO) who during the process requested that the rider sign the Doping Control Form in relation to his notification. The rider queried what it was that he was signing and the DCO explained.

Recommendation 27: The Chaperone should always confirm the name of the rider by requesting photographic identification immediately prior to notification. Further, on confirmation of the rider's identity, the Chaperone should require the rider to sign the notification section of the Doping Control Form as soon as practicably possible and before the rider enters the processing room.

The rider's identity was most often checked using the original sports license, which in certain cases did not include the required photograph, or an official identity document (passport, identity card). The person accompanying the rider sometimes presented only a photocopy of the license and the DCOs completed a Supplementary Report and requested that the rider return later to present the original document.

Recommendation 28: The UCI require that rider license issued by National Federation include an appropriate photo of the rider so that the license can be used as a means of identification during doping control.

Given that testing conducted in the team hotels in the morning or evening was planned late the evening before there was no request made to the hotel to secure a suitable testing room for these particular test missions. The common practice was where only one team was to be tested the team doctor's room was used (subject to his agreement) or the DCO's room if they were staying in the same hotel. On the majority of occasions the team doctors always assisted with this request.

In situations where multiple teams were tested in the same hotel the DCO would ask the hotel on arrival for use of a room for the testing. On all occasions the hotel assisted with no charge. However, the temporary processing room was not always ideal and in many cases did not contain a toilet directly off the room or an area for the riders to wait separate from the processing room. This led to a number of riders being in the same room as where the urine and blood collection occurred, or riders having to walk through public areas of the hotel on their way to the toilet and back to the processing room holding their urine collection vessel.

Recommendation 29: When a room is required for the testing of riders from more than one team all riders selected do not wait within the room where the processing of urine and collection of blood samples occur. The riders should wait directly outside the room or in another area where seating can be arranged under the direct supervision of the Chaperones.

Further to the above there were some time delays observed in trying to source a suitable room to conduct testing where riders from more than one team were being tested in a hotel.

Recommendation 30: The UCI should discuss with the ASO how guidelines can be provided to all hotels used on the Tour detailing the potential need for a temporary processing room and for each hotel to identify (and advise their staff accordingly) in advance of the preferred room for doping control activities.

Two further areas where the IO Team felt improvements could be made is firstly, once the final rider was in the temporary processing room with the DCO and Medical Inspector, there was no further need for the Chaperone to wait outside as even in the case of a partial sample or if the rider needed to leave the room temporarily, the DCO or the Medical Inspector could have chaperoned the rider. On one occasion, the DCO failed to consider this and as a consequence three Chaperones were waiting outside for one hour where they could have been advised to leave.

Secondly, a situation arose whereby a rider selected for early morning test for a urine sample had difficulty providing the sample prior to his team's departure to the starting area. The team departed without the rider and arrangements were made for the rider to be transported to the starting area at a specific time regardless of whether he had provided a urine sample or not. This is a potential issue should a rider be physically unable to provide a sample prior to the race starting or a rider who may chose not to provide a urine sample prior to the race starting. In questioning the UCI's position on this the IO Team where advised that if a rider did not provide a urine sample prior to the deadline passing which would ensure the rider made the start of the race, the rider would be targeted Post-Finish.

Recommendation 31: Early morning testing should be conducted early enough to enable the collection of the first urine sample of the day, wherever possible. If notification occurs after a rider has awakened and urinated then if a sample cannot be provided prior to the rider departing to make the start of the race then target testing should follow at the next available opportunity.

Post-Finish

As mentioned previously, the Post-Finish TDP was communicated to the Lead DCO approximately one hour before the end of the stage and at this point all the Chaperones are present in the Station area. When the first rider was at 10km from the finish line, the DCOs handed the completed notification forms to the Chaperone Coordinator. Initially this was completed at the 5km mark but was changed to 10km following a request by the Chaperone Coordinator who required additional time for his Chaperones to prepare for notification. A good example of this was in circumstances where it was assumed that a rider was wearing the colours of his team, but in actual fact was a national champion and thereby eligible to wear his national colours (albeit branded with his team's sponsors). The addition time provided by moving from 5km to 10km allowed the Chaperones to counter such instances and to familiarise themselves with the complex task of chaperoning in the finish area which changed with every stage.

Equally, the Chaperone Coordinator required time to prepare his team and to decide which Chaperone would notify which rider, based on his knowledge of his team, language of the rider and the capacities of each Chaperone. For example, it was less demanding physically (despite being longer for media reasons) to Chaperone the stage winner given that he was immediately surrounded by the media and therefore easy to find and consequently to notify. For the same reason, more agile Chaperones were selected to notify the other riders as it was sometimes necessary to run after the riders through the busy Post-Finish area with other riders and media present and the peloton sometimes arrived at a high velocity.

After receiving the notification forms, the Chaperones proceeded to the Post-Finish area looking for a team representative (eg. masseur, physiotherapist or doctor, who were generally waiting for their riders' arrival) of the rider they had to notify. At 5km, the Chaperone received a walkie-talkie message from the Chaperone Coordinator which was a signal to inform the relevant team representative that a rider of his team had been selected for sample collection. The rider's name was not given at that time but rather the Chaperone stayed close to the team representative and at 1km the Chaperones received another walkie-talkie signal at which point the rider's name was revealed to the team representative. The rider was then flagged down by either the Chaperone and/or the team representative as he passed through the Post-Finish area and the "chaperoning" started, with the rider signing the notification form and being accompanied to the Station. The rider was generally at the Station less than 5 minutes after his arrival at the Post-Finish area.

This process took much longer when the rider was the stage winner, leader of the general classification or holder of one of the other three jerseys (Sprint, Mountain, Junior) given that he was first required at the protocol ceremony and then to attend media activities. It is to be noted that the rider was in full view of the Chaperone at all times, with the exception of the protocol ceremony where the rider was on a stage and was therefore seen by hundreds of persons, without taking into account the TV audience. Media activities were commonly about an hour in length and the Chaperones were courteous and understanding of the rider's obligations while also on occasion providing a subtle sign to the rider if such activities were starting to take too long. The Chaperone remained with the rider until the rider entered the Station, where the Chaperone would enter with the rider and hand over the notification form to the DCO. At that time, the Chaperone would wait outside in the Station area in case of a partial sample or if the rider had to temporarily leave the Station following authorisation from the DCO which required further chaperoning until the rider re-entered the Station.

The Chaperone Coordinator managed his team well, who in turn interacted professionally with the riders and the team representatives and on no occasion did the IO Team observe a rider that was not chaperoned appropriately. In addition, the process was fine tuned throughout the Tour with adjustments made to ensure the process improved. As well as the change from 5km to 10km detailed above, it was quickly established that walkie talkies would significantly assist in the coordination of notification and these were provided and used from day 3 of the Tour.

The IO Team noted four areas of concern in relation to the actions of Chaperones in the waiting area Post-Finish. The first was that a member of the media asked through the perimeter fence what riders where currently in the Station being tested. The Chaperone outlined who was currently in the Station which the IO Team felt was inappropriate. The second was that a number of opened bottles of water were left discarded in the waiting area tent on the ground with riders coming and going in this area.

Recommendation 32: If a drink is opened and left unattended it would be deemed best practice to ensure such drinks are discarded if it leaves the control of the rider who opened it. Whilst the rider is responsible for his own fluid intake the Chaperones could assist with ensuring the drinks are discarded if left or advising a rider if he is moving from this area to take his drink with him.

The third observation was that following the individual time trial the majority of the riders had trouble providing a urine sample. One of the team doctors brought some beers to the Station but was not allowed to enter with them as his rider already had a team representative. The doctor then gave a Chaperone several beers to give to his rider which the team doctor opened. The rider was in the processing room at the time and the Chaperone came into the station and handed the rider two

opened bottles of beer. The rider accepted them without asking where they came from or who opened them, potentially exposing them to unnecessary risk[13].

Recommendation 33: Chaperones should never provide open bottles of fluid to riders at any stage especially those not opened directly in front of the rider.

Finally, on one occasion a Chaperone was prevented by a police officer to follow his selected rider until the Chaperone explained his role. Even on explaining his role the police officer would not let him through and physically restrained the Chaperone although the Chaperone managed to get away from the police officer and continued with his duty.

Recommendation 34: Police officers in the Post-Finish area of each stage should be briefed about the role of the Chaperone and are provided a visual of the UCI Chaperone bibs so that Chaperones are not impeded in fulfilling their role.

The conclusion of the IO Team was that the chaperoning of riders was a complex and important part of the programme that was very well executed. It is important to note that Chaperones have only become a mandatory requirement of the Tour since 2008, prior to this the teams were responsible for ensuring the selected riders arrived at the Station within a required time limit.

The Notification List

One of the peculiarities observed on the Tour is the use of a notification list. Article 180 of the UCI Rules states that *"In the case of a mass start road race [ie. the Tour] the organizer and the Doping Control Officer shall ensure also that a list of the Riders who are required to appear for Sample collection shall be displayed at the finish line and at the entrance of the doping control station immediately before the finish of the winner. The Rider, immediately after finishing or abandoning the Race shall locate and proceed to the place where chaperones are waiting to notify Riders."*

The rationale for this list is twofold. Firstly, it is a historic element of notification and was used when Chaperones were not present at the Tour (or indeed for races where chaperones are still not used). Therefore, when Chaperones were not present the responsibility was placed on the rider and the teams to present to doping control. As the IO Report from the 2003 Tour suggested in this day and age this is an unacceptable means of notification and for this reason for the past three years a team of Chaperones has been employed to notify each rider at the conclusion of each stage. The second reason provided by the UCI for this rule is that even though they now have Chaperones in operation at the Tour the principle that riders and teams have a certain responsibility to assist in the doping control process is one that should be encouraged. Therefore the reference to the list for the Tour remains in the Rules.

If it is accepted that the no advance notice nature of notification is a key element of a high quality doping control programme, there are some inherent problems with this list. Before outlining these problems it is worth noting that representatives of the teams play a very important role in assisting with notification. On many occasions the race finishes with a bunch sprint and as a result almost the entire peleton crosses the finish line within five minutes of each other. Without the assistance of the team representatives it would be extremely difficult to ensure that every rider was notified before they passed the Chaperones as there are many media, riders, other team representatives and some VIPs making the finish line very crowded. However, it is not clear what real purpose the list has. The Chaperones and the UCI have a system for firstly advising the team representatives that a member of their team will be tested and then the name of the rider. Therefore, the team representative is able to assist with notification. The IO Team did not observe one single occasion where this was not completed successfully. Therefore, in circumstances where the peleton finishes all together the list is then rendered useless. But there is significant interest in the list even post-notification. The IO Team observed on many occasions team representatives, media and even the event organiser ASO noting the numbers of the riders to be tested and on some occasions taking photos of it. For what purpose

[13] Article 5.4.1g of the International Standard for Testing states that "should the Athlete choose to consume foods or fluids prior to providing a sample, he/she does so his/her own risk, […]"

the IO Team is not sure but it is true that if a team were to record the list on a daily basis they would have a running record of who the UCI was testing. That in itself is not hugely significant as this information can be collected in a variety of ways, but the IO Team found the ease of access to the post-competition test plan surprising, especially given that there is no apparent value of the list.

Recommendation 35: The UCI review the rule and practice related to the publication of the notification list for the Tour and reference to the list be removed for future Tours and that, where possible, Chaperones are part of every cycling event where Post-Finish testing occurs.

Sample Collection Process

Urine Sample Collection

The riders were all professional cyclists who were well informed of the requirements related to urine sample collection.

At the start of each processing session, the rider was required to provide details of their address and contact phone number, which could be that of the team trainer or physician, which slowed up the collection process. A discussion was held between the DCOs and the UCI to determine whether this repetitive information was really necessary during testing that lasts three consecutive weeks. It was ultimately indicated that this information should be requested and recorded for each control. The DCO asked each rider for his personal declaration about the use of medication or the existence of a TUE. Many riders referred to ADAMS as a response.

Recommendation 36: Where possible repetitious information be pre-completed on Doping Control Forms to be confirmed by the riders so as to speed up the process.

All of the riders chose a urine specimen container after rinsing their hands without the use of soap. On one occasion it was observed that a rider after washing his hands then sat down again, took a drink and then proceeded to provide a sample. The IO Team reinforced the need for the DCOs to ensure that the last thing to happen before providing a sample is the washing of hands (to avoid any possibility of manipulating the sample during provision), which was then reinforced to the rest of the team.

After opening the urine collection vessel, the riders were accompanied by the Medical Inspector into the washroom. The Medical Inspector witnessed the provision of urine. The washrooms were cramped and so it was difficult for the Medical Inspector to position him adequately for a good view of urinary flow, despite the glass wall on one of the washrooms (see recommendation 10). Early in the Tour, the IO Team stressed to the DCOs and Medical Inspectors that they just watch the provision of urine and should at no time leave the rider unobserved while providing a sample. This was again reinforced to the rest of the team.

The riders retained control of the urine collection vessel and the collected sample until the A and B sample bottles were sealed. The number codes on the A and B sample bottles were checked and recorded on the doping control form. The person who witnessed the provision of the sample confirmed in writing that he had observed the urine sample being provided.

The partial sample system used was an effective and easy means of both securing the first sample and also mixing further samples to make up the full required volume. If more than one partial sample was provided the second or subsequent samples were sealed into a separate new partial sample and not mixed with the original. The volume of urine provided was then recorded as the actual amount in each particular partial sample rather than a combined measure. The Doping Control Form allows for a maximum of three partial sample measurements, meaning that if the rider was unable to provide the minimum volume after three attempts but did provide some urine on each attempt, that there would be three separate partial kits sealed for one rider. Once the minimum volume was provided then the seals on all the partial samples are broken and added into a new collection vessel until the required volume was obtained.

Recommendation 37: When more than one partial sample is provided, each time thereafter where an additional partial sample is provided which does meet the required volume it be combined with the existing partial sample into a new partial kit and total volume listed and that the maximum amount of urine is then put into the A & B bottles rather than just recording the minimum volume for each partial sample.

Non-Conformity 1: On one occasion, the IO Team observed that a partial sample was not sealed in accordance with the UCI protocols, but rather the sample was not sealed at all and was instead placed in view of the athlete and others in the hotel room where the collection had taken place. On checking the paperwork there was no record of there being a partial sample. This departure constituted a non-conformity with respect to the International Standard for Testing and had the potential to undermine the integrity of the sample in the case of an adverse analytical finding. This observation was referred to the UCI, resulting in instructions to seal, record and immediately refrigerate all samples, even partial ones, being provided to all the DCOs and that procedures for partial sample must be adhered to as well. In addition, the offending DCO was sent home and replaced.

On this same occasion, the DCO authorised the rider to have dinner before submitting to doping control. He was chaperoned and had dinner for about 90 minutes. The concern was that in this specific case, the samples were sealed more than two hours after notification. There is no breach of the rules here but in the view of the IO Team, the DCOs should at appropriate times, be firmer in requiring riders to provide a sample at the earliest opportunity given that for particular substances with short detection windows, delaying by a couple of hours the collection of sample can lower the concentrations of substance(s) in urine. In addition, no supplementary report was completed so the situation would have gone unnoticed had the IO Team not been present.

Recommendation 38: The room for the rider to extend the period from notification to sample provision should be closely managed and in instances where such a period is unusually long a supplementary report completed.

The Medical Inspector measured the specific gravity of each urine sample using urine litmus strips (the refractometers that were provided were not operational) and the DCO recorded the sample's compliance or non-compliance on the Doping Control Form by putting a check mark in the appropriate box. The rider answered the question regarding his consent (or not) to anti-doping research. The rider could make comments about the anti-doping control procedure before having his representative sign the Doping Control Form and then signing it himself. A copy of the Doping Control Form was given to the rider, who checked that the copy addressed to the Laboratory was anonymous. The urine samples were then placed in a refrigerator or for unannounced tests in a bag containing cold packs.

Blood Sample Collection

All blood samples (ABP, anti-doping controls on serum and complete blood tubes) consisted of an A and B sample except for medical monitoring follow-up performed in Rotterdam before the testing began where a single, unsealed serum tube was used. All of these samples were collected by the Medical Inspector in accordance with the information given by the DCOs.

For the ABP samples, riders were not to have conducted any exercise in the last two hours. On arrival at the (temporary) Station all riders remained seated for at least ten minutes before the blood sample was collected and answered the questions on the ABP Supplementary Report Form, which was then signed by the rider. The Medical Inspector collected the blood sample once the DCO advised him that ten minutes had passed. The Medical Inspector asked the rider to choose the blood sample collection equipment (2 EDTA tubes, 2 coded vials with A and B safety seals, numbered labels with a bar code, the material needed to collect the blood sample and final plaster). The Medical Inspector asked the rider to verify that the number codes matched. He then disinfected the skin and collected the sample, often without a tourniquet. The tubes were immediately homogenized as per the Laboratory's request. The needle was then withdrawn and a plaster offered to the rider after compression of the venous puncture was complete.

On some occasions, the Medical Inspector did not have the needle disposal container with him (for perforating waste). In this case, the winged Epijet microperfuser needles ("butterfly" needles) were replaced in their original packaging with their adapters and taken by the Medical Inspector to then be discarded.

Recommendation 39: There should be an obligation to provide Medical Inspectors with the appropriate equipment in sufficient quantities to discard perforating waste on site, as well as give them instructions about their later destruction by a certified organisation.

The blood samples were then provided by the rider to the DCO, who completed the Doping Control Form. After a second control, the DCO recorded the coding number and glued the numbered labels with a bar code to the collected samples and the Doping Control Form.

Recommendation 40: In order to speed up the process and to make the process more efficient the Medical Inspector, after the rider has verified the number codes on the coded vials with the A and B safety seals and labels, should immediately stick the two coded labels on the two vials of blood to be collected.

The process already identified above for urine collection was then followed with the exception that when the blood samples were placed in a refrigerator or for unannounced tests in a bag containing cold packs this was done so after 15 minutes of them being in room temperature.

Chain of Custody & Transportation

The DCOs were responsible for securing, preserving and sending the collected samples and anti-doping control documents to the Laboratory. The certified shipper was World Courier and the materials were sent by ground transportation, except for ABP samples and medical monitoring in Rotterdam where a representative of the Lausanne laboratory, who was on site, was responsible for bringing the samples to Lausanne by plane, which required the use of an external laboratory reception form.

All of the samples (blood and urine) were transported under refrigeration in boxes, all of which were equipped with sensors to monitor the temperature of the samples during transport. For Post-Finish testing, the samples once they were collected and sealed were placed into the refrigerator within the Station. Urine bottles were removed from the Styrofoam box so that the sample could be chilled prior to it being packed into the courier boxes. Blood samples were also stored in the fridges. For unannounced testing the DCOs had small cooler bags with ice in them and the samples once sealed were put on ice to chill them prior to returning to the hotel or other courier collection point.

The samples were removed from the fridge and placed in small cardboard boxes which were then placed in plastic bags and sealed. One of the small cardboard boxes had a temperature control monitor placed within it which measured the temperature within the box at certain stages of the samples travel to the Laboratory. The IO team requested a copy of the graph produced by the courier on delivery of the samples. The UCI provided this and it showed that the samples were transported within the required temperature range of +4 to +12 degrees.

Throughout the Tour, the representative of World Courier parked next to the Station and waited until the sample collection was complete to immediately receive the collected samples and receive the documentation required for transporting them to the Laboratory as well as copies of the Doping Control Forms intended for the Laboratory. When the samples were collected in the teams' hotels, the DCOs agreed the meeting locations with World Courier in order to hand over the samples. The chain of custody therefore did not take into account all of the movements between the collection locations at the various hotels of the teams and the location where the samples were provided to World Courier. The same courier driver was on hand each day which proved to be very effective and a streamlined process by the end of the Tour.

One of the observations made by the IO Team regarding the actual handling and transportation of the sample is that there was no locking mechanism on the courier boxes. This could be a useful addition to future Tours given that couriers routinely offer simple and cheap ways in which to ensure that courier boxes have not been opened or tampered with.

Results Management

Laboratory Arrangements

The Swiss Laboratory for Doping Analyses in Lausanne was contracted by the French Cycling Federation and ASO to undertake the core of the sample analysis for blood and urine in relation to the Tour. It is to be noted that as the UCI was not a party to the Agreement, UCI has limited contractual options should a problem arises with respect to the laboratory arrangements. The IO Team was provided with a copy of the Agreement which was signed prior to the start of the Tour. The Agreement did not cover the analysis of blood samples for the ABP as this was covered in an existing contract between the UCI and the Lausanne Laboratory.

In addition, the UCI advised the Laboratory for Doping Analysis of the German Sports University Cologne in Germany (via an email sent in advance of the Tour) of its intention to send a number of urine samples for analysis to be collected during the Tour on three different dates. This request identified that the UCI expected that the analyses conducted by the Cologne Laboratory would complement those performed by Lausanne Laboratory and that a focus should be placed on the analysis of new substances and/or methods drugs and/or with new analytical methods in use by the Cologne Laboratory. The email was the only document evidencing the arrangements made.

For those samples sent to the Lausanne Laboratory, the UCI requested expedited analysis of the negative results no later than 72 hours from the time samples were received by the laboratory. There were no such arrangements suggested or made with the Cologne Laboratory. In the absence of any arrangements, it was observed that the Cologne Laboratory reported the results within the ten working days as specified in the International Standard for Laboratories.

Recommendation 41: The UCI should directly sign agreements (and thereby be responsible for monitoring the services provided) with all anti-doping Laboratories to be used for the analysis of samples collected during the Tour and include provisions for the expedited analysis of the samples.

Storage of Samples Post Analysis

The UCI outlined that it did not have a specific policy in place regarding the storage of samples post analysis (ie. outside of the standard 3 months storage period required by the International Standard for Laboratories). The UCI informed the IO Team that they would consider the storage of a few samples of selected riders based on final results of the Tour. The IO Team has not been made aware of any samples collected in the lead up to or during the Tour that have been placed into long term storage for reanalysis at a later stage (for example, the performance of the riders at the Tour could be a criteria that could trigger reanalysis of previously collected samples). Acknowledging the difficulties in detecting some of the new substances which athletes may be using, the UCI could have requested from the laboratories for long-term storage of some of the samples collected.

Recommendation 42: The UCI consider the development of a standard policy regarding the long term storage of samples for its high profile events such as the Tour based on intelligence and performance at the time of the event.

Process

The process for results management is detailed in the UCI Rules (Chapter VII). While the IO Team did not observe the results management in practice, from an examination of the relevant articles the IO Team noted the UCI has the responsibility to conduct the initial review of a possible anti-doping rule violation (ie. whether there were any departures from the applicable International Standards or a Therapeutic Use Exemption (TUE) was in place). The UCI is then also responsible for the management of the B Sample analysis, if required. However, once the UCI 'makes an assertion that an anti-doping rule violation has taken place'[14] the result management authority with jurisdiction and

[14] UCI Rules, Article 234

responsibility to instigate disciplinary proceedings for a rider and/or support personnel during the Tour rests with the National Cycling Federation[15] of the rider and/or support personnel.

The IO Team felt that for events of the level of the Tour and to ensure consistent application of the UCI Rules by experienced judicial panels on an expedited basis, the UCI should be responsible for the first instance hearing body. Otherwise, it is possible that the UCI could be required to appeal decisions of National Cycling Federations (or National Anti-Doping Organisations) to CAS given the varying levels of experience and expertise amongst National Cycling Federations (or National Anti-Doping Organisations). For such potentially high profile doping cases this can be very costly and time consuming.

Recommendation 43: To further enhance their anti-doping programme, the UCI should consider the merits of the UCI managing first instance hearings in relation to possible anti-doping rule violations on the Tour rather than delegate this results management authority to National Federations as is the current practice.

Possible Anti-Doping Rule Violations

By the end of the Tour there were no opportunities for the IO Team to directly observe the results management process of a possible anti-doping rule violation. However, the IO Team were advised of four Presumptive Analytical Findings, five Atypical Findings and one Adverse Analytical Finding.

With respect to the four Presumptive Analytical Findings, the Laboratory provided the required documentation to the UCI who in turn responded by confirming that the riders in question had valid TUEs and/or Declarations of Use were in place and therefore the Laboratory reported the sample as Negative. This demonstrated that the Presumptive Analytical Findings process was effective and that the process ensured that the Laboratory was not required to conduct a confirmation analysis on the finding, reducing the time and cost for the Laboratory.

Regarding the five Atypical Findings, following further investigation by the Laboratory, only one of the Atypical Findings was formally reported and what the IO Team able to conclude from the data on ADAMS, either IRMS was performed which concluded that there was no presence of exogenous steroids or that the rider was known, and had sufficient longitudinal history to suggest a naturally elevated T/E ratio.

For the one Adverse Analytical Finding, the IO Team was made aware of this after the Mission had concluded and while within the scope of the Mission, the IO Team is not in a position to comment further given this case has yet to be resolved.

Code of Conduct for UCI Pro Teams

The IO Team was aware that in 2004 a Code of Conduct was agreed by ProTeams to demonstrate their commitment to and adherence with the UCI Rules, specifically as they related to the health of riders and anti-doping regulations. The Code highlighted a number of areas where ProTeams would 'strictly comply', notably that UCI ProTeams undertake to:

- Without prejudice to the right to terminate the contract for serious misconduct, not to enter any licence-holder for events who is subject to disciplinary proceedings for a breach of the UCI anti-doping regulations, by any competent body under the World Anti-Doping Code (Article VIII)

[15] For a number of National Federations (eg. Italy, UK, USA) this jurisdiction is delegated to the National Federation's National Anti-Doping Organisation

- Without prejudice to the right to terminate the contract for serious misconduct, not to enter any licence-holder for events who is subject to judicial proceedings or investigation for facts relating to sporting activity, or any act constituting a breach of the UCI anti-doping regulations, or any other intentional criminal act (Article IX)

The UCI informed the IO Team that this Code was an informal arrangement among the ProTeams and was never included in UCI regulations. Interestingly the Code does not seem to appear on either the UCI's website or the website of the Tour. It is therefore the conclusion of the IO Team that the Code is now not observed by teams competing in the Tour and is an obsolete agreement.

The reason the Code came to the attention of the IO Team was that during the Tour there were a number of public statements related to investigations into riders competing on the Tour. While it is acknowledged that none of these investigations had reached a formal stage, it was clear to the IO Team that the value of reinvigorating the Code would have substantial benefits to the UCI, ASO, participating teams and clean riders. In addition, the matter of the Code was informally discussed a number of times with representatives of the ProTeams.
Firstly, from what the IO Team observed, the UCI is highly unlikely to be successful in tackling doping in the sport of cycling without the active and committed involvement of the ProTeams. As stated previously, the IO Team did receive a number of positive comments about the IO Team's presence on the Tour and is of the view that there are not an insignificant number of teams who would support a more committed and unified stance against doping by all ProTeams thereby assisting the UCI. Secondly, the ASO has a significant vested interest in ensuring that the integrity of the Tour is maintained. A Code would allow the ASO to play a more active role in anti-doping by providing them a mechanism to challenge teams who are less committed than others to anti-doping efforts. In the same way, a Code would allow owners of ProTeams to reinforce the value of clean sport and provide clear expectations related to who they employ as riders and support staff. Finally, it is clear that many riders want the Tour to be seen as clean, want their performances to be recognised as those of clean riders and a Code would again reinforce their ongoing commitment to ensuring that continual progress is made in the area of anti-doping at the sport largest event.

Recommendation 44: The UCI should reinvigorate discussions regarding a code or standard of conduct for ProTeams with the intention of establishing a mutually agreement before the next season of Grand Tours.

Record Management & General Administration

Therapeutic Use Exemptions

During the Tour no special arrangements existed for riders to submit TUEs as you might find at major events, such as the Olympic Games. Riders are expected to submit TUE applications via ADAMS in accordance with the UCI Rules (Chapter IV) and are also required to submit Declaration of Use via ADAMS.

The IO Team had the chance to review TUE related data through ADAMS and through a comprehensive file prepared by the UCI where all TUEs effective during the Tour and all declarations submitted by the competing riders (either before or during the Tour) were listed. The vast majority of riders (122) had either a valid TUE or an applicable Declaration of Use during the period of the Tour.

It was noted that no TUE application was filed during the period of the Tour. The last TUE application submitted before the start of the Tour was filed on ADAMS on the 12 June 2010 and the exemption was granted on 17 June 2010, demonstrating the expedited procedure in place. However, 22 Declarations of Use were submitted via ADAMS during the period of the Tour, the majority for Glucocorticosteroids and one for a beta-2 agonists. The most common medical condition for which riders applied for TUEs or submitted a Declaration of Use for was classified as 'allergies' and asthma and its clinical variations. Other conditions were infections, medical conditions of the musculoskeletal system, skin diseases, and diseases of the gastrointestinal system.

On a random check of the files of the riders, it was concluded that the UCI TUE Committee granted TUEs in line with the International Standard for TUEs and the Medical Information to Support Decisions of the TUE Committees, provided by WADA, were well taken into account. However, it was noted that in at least one case out of the files reviewed, a TUE that had been granted in 2009 did not indicate the precise dose of the substance to be used, and instead stating "as needed". This is contrary to the International Standard for TUE and has potential to cause problems with the results management process in case of an adverse analytical finding.

Sample Collection Paperwork

The following UCI forms were used during the Tour.

- Riders to be Tested Form
- In-Competition Notification Form
- Entry/Exit Log
- Doping Control Form
- Supplementary Report Form
- Team Notification Form
- Athlete Biological Passport Supplementary Report Form
- Laboratory Advice Form

It was noted that the DCOs do not complete a DCO Report Form for each stage or mission but rather the Lead DCO provides a final report at the end of the Tour to the UCI. The IO Team did receive a copy of the DCO report and had the opportunity to view this report. The report was minimal in its content and identified a small number of issues, which were generally consistent with those observed by the IO Team.

Recommendation 45: The UCI request a DCO Report Form to be completed for every testing mission (post race; and morning/evening testing) so that an accurate record of the testing can be recorded on file and so that issues can be tracked and dealt with immediately during the event rather than after the event has concluded.

Completion of Doping Control Paperwork

The Lead DCO provided the IO Team with copies of the daily doping control paperwork on a regular basis. Part of the IO Team's review process involved highlighting areas of error or query with the UCI as required. The relevant forms were then provided to the UCI anti-doping representative for discussion and comment with the DCOs. The following are examples of observations made by the IO Team which were considered worth reporting to the UCI.

- A sample number was recorded incorrectly on the Laboratory Advice Form
- DCO did not sign the Doping Control Form
- The time of test completion was missing from the Doping Control Form
- Two riders provided blood prior to the two hour period elapsing (1hr 20 minutes) post exercise when providing ABP samples
- No rider number or date of birth was recorded on the In-Competition Notification Form
- No chaperone name or signature was recorded on the In-Competition Notification Form

Non-Conformity 2: There was one non-conformity noted in the doping control paperwork. On investigation, it was noted that a DCO noticed that after having signed the Doping Control Form with the rider present and then provided a copy of the form to the rider, that he had omitted to include some information related to the ABP the Doping Control Form. At this point the rider had left the station, although the rider's doctor was still present. The DCO requested the copy of the Doping Control Form from the rider's doctor and explained that he had omitted to include some information. The rider's copy was then inserted back under the original Doping Control Form and the missing information completed in the company of the rider's doctor. That said, the DCO did complete a Supplementary Report Form reflecting the incident.

Recommendation 46: Doping Control Forms and other relevant documentation should be reviewed by the UCI representative on a daily basis and issues arising from any errors should be addressed immediately with the applicable DCOs.

Riders to be Tested Form

The Riders to be Tested Form was completed in advance of the Post-Finish testing and was not used for pre-competition testing. No signature was required on this Form. On two occasions a random draw was conducted by the DCOs and was completed by using numbered pieces of paper drawn out of a hat. The first draw was to select the team number 1-22, with the team number selected reintroduced to the successive draw. Then the rider number of the respective teams was then selected 1-9. It was noted that the draw would have been easier to conduct if the DCOs had access to pre-made cards (as is the case in many draws conducted on teams) which they could have used on several occasions rather than have to create the numbers on pieces of paper each time a draw was required. Indeed on the second draw observed the DCOs had created pre-made cards.

On one occasion, the Lead DCO accompanied by a second DCO asked members of the IO Team to participate by drawing cards. When the drawing process was finished, the IO Team requested that the DCOs repeat the procedure without the involvement of the IO Team, which they did with no hesitation.

Recommendation 47: Rider selections, including those from random draws, should be recorded on a Selection Criteria Form or on a daily report which the DCO completes on receipt of instructions from the UCI for each testing mission and is then signed by the DCO for tracking and record purposes.

Notification Forms

For Post-Finish testing the UCI used a separate In-Competition Notification Form, whereas for pre-competition testing the standard notification section of the WADA-style Doping Control Form was completed to record details of rider notification. The IO Team were advised that the use of the separate In-Competition Notification Form was to avoid any damage (eg. rain) to the Doping Control Form when notifying riders outside. It is the IO Team's view that this practice duplicated processes and had the potential to increase the risk of not completing fully or accurately both the In-Competition Notification Form and the Doping Control Form. When speaking with the DCOs and Chaperones it was clear that both groups would have preferred to use the one form, notably the Doping Control Form.

Recommendation 48: The UCI utilise the notification section of the Doping Control Form and provide waterproof folders to the Chaperones to ensure the paperwork remains in good condition regardless of the weather.

Further, it was noted that both the DCO and the Chaperone signed the In-Competition Notification Form although it was only the Chaperone who conducted the notification and by signing the form the DCO was stating that he also notified the rider of his selection for testing. Following discussion, the UCI outlined that this process was more for the purpose of authorisation of the test but agreed that only the person formally notifying the rider should sign the form. However, the IO Team observed that one DCO failed to adhere to this amendment and continued to sign the notification form until the end of the Tour.

Recommendation 49: Only the person formally notifying the rider should sign the In-Competition Notification Form or the notification section of the Doping Control Form, thereby clearly identifying who notified the rider.

Entry/Exit Log

For the first time at the Tour an Entry/Exit Log was maintained for Post-Finish testing, allowing for a clear record of who entered the Station area on any given day. It is to be noted that the Entry/Exit Log is not a mandatory requirement of the International Standard for Testing. However the WADA 2010 Guidelines for Urine Sample Collection (Article 6.3.2) states that "an entry and exit log should be maintained to record the names of the persons entering the facility (i.e. the Doping Control Station), their position, and the times of arrival and departures".

The security guard appointed by ASO was responsible for ensuring that no unauthorised persons entered the station whilst also being responsible for recording the entry and exit information. The security guard was provided with the names of the riders to be tested 5km from the finish of the stage so she could enter their names on the Entry/Exit Log. This was designed to speed up the process when all riders arrived to the Station, but it did make one additional person aware of the riders to be tested and potentially allowed for the illicit transmission of the TDP for the stage, compromising the no advance nature of testing. It is not known if the security guard signed a confidentiality agreement.

Initially the completion of this log proved problematic as a signature was required from everyone entering or exiting the Station. Given that riders had usually signed an In-Competition Notification Form a few minutes prior to arrival at the Station area and that there were usually quite a few people outside the Station area entrance, the riders were generally eager to proceed through the gate without having to sign on a further occasion. This resulted in a number of riders and their representatives not signing in or out on the Exit/Entry Log as the main focus of the security guard was to try and restrict unauthorised persons entering the station. It is the opinion of the IO Team that the role of the Chaperone could include monitoring the entry and exit of persons to the Station once they have entered the waiting room. The Entry/Exit Log could be located in the waiting tent area and be completed on entry and on exit with the applicable Chaperone responsible for ensuring this was completed for his rider and rider's representative. This would also provide wet weather shelter for

the paperwork and reduce the need for an additional person to perform this role inside the entry gate with the security guard on the external side of the gate being able to focus on just managing the entry gate.

Recommendation 50: The UCI to consider Chaperones being responsible for the entry and exit details for their specific riders and riders' representative leaving the security guard to be solely responsible for policing access to the Station area.

Further it was noted that should a rider be required to temporarily depart the station on agreement by the DCO, then this was to be recorded on the Exit/Entry Log including a note of the reason for such departure, in accordance with Article 7.3.5 of the International Standard for Testing . However, there was no dedicated section on the Entry/Exit Log to record this, so it was agreed that this be included in the comments section of the Doping Control Form should it occur.

It was also observed that the exact arrival time at the Station was the time recorded by the security guard at the Station entry and that there was no instructions for the Chaperones to take note of this and indicate it to the DCO who is in turn required to include this detail on the Doping Control Form. The IO Team suggested that an improved process could be that the Chaperones could take note of the time recorded by the security guard to avoid any discrepancies in the real arrival time. This process was then adopted for the duration of the Tour.

One further improvement identified regarding the control of the entry to the Station area and access to the Station was that Station access passes could be provided by Chaperones during notification. This would allow for easy identification of riders and their representatives authorised to enter the Station by the security guard on the external side of the Station entry gate. The access passes could be collected from the rider and his representative on the completion of the test.

Recommendation 51: The UCI consider the use of a doping control access pass which the Chaperone could provide to the rider and his representative at the point of notification to assist the security guard in indentifying who can enter the Station.

Acknowledging that the Entry/Exit Log is not a mandatory requirement some of the IO Team members felt that the majority of this information was already captured on the Doping Control Form and the arrival to the Station could be noted by the Chaperone on the Doping Control Form at the time of entering the gate. Also the finish time of the session is noted on the Doping Control Form by the DCO. If a rider was required to leave the station temporarily this could be recorded in the comments section on the Doping Control Form or be recorded on a Supplementary Report Form. The Doping Control Form contains space for the rider's name and signature outlining that a representative was present or not. The use of such a form is therefore at the discretion of the testing authority and should be assessed on an event specific basis.

Specific Gravity

The IO Team noted that the actual measurement of specific gravity was not recorded on the UCI Doping Control Form but rather whether the sample met the required specific gravity measurements or not (ie. "Yes" or "No"). The IO Team had not encountered the recording of the specific gravity in this manner before and after consulting with the International Standard for Testing found that it is not a requirement to record the actual reading but rather whether the sample met the requirements.

Further, the IO Team identified that while this is not a requirement of the International Standard for Testing, the WADA template doping control form does include space in which to enter the actual values of the specific gravity. This suggests that recording the value is something that is deemed to be best practice.

Recommendation 52: WADA to confirm with Anti-Doping Organisations whether there is a requirement to record the actual value of specific gravity or whether a 'yes/no response is sufficient.

Declaration of Substances

The completion of the declaration of substances taken in the last seven days section on the Doping Control Form varied. The declaration of substances used by the riders in the last seven days needs to be as precise and accurate as possible when substances declared are prohibited and/or otherwise regulated.

On some occasions the rider recorded "see ADAMS", on others it referred to specific Declarations of Use and/or TUEs in ADAMS while on occasions the full list of medications was recorded. Listing all substances taken in the last seven days is useful information for the Laboratory and a requirement of Article 7.4.5n of the International Standard for Testing, and simply making reference to "see ADAMS" or by stating "TUE" or "DoU" only, is of no assistance to the Laboratory, which appropriately has no knowledge of the riders' identity and data entered into ADAMS.

On one occasion, a rider simply declared "injection to the left knee" on the Doping Control Form without mentioning the route of administration or the exact date/time of administration. This rider's sample returned a Presumptive Analytical Finding and the information on the Doping Control Form proved to be insufficient to link the finding with the declaration. The case was resolved with by the confirmation of the existence of a Declaration of Use the rider had submitted on ADAMS.

Recommendation 53: Riders are explicitly encouraged by the DCOs to list the actual substances (drugs and supplements) they have taken in the specified period rather than just referring to ADAMS, existing TUEs or Declarations of Use.

Research Question

The IO Team felt that the reason and terms related to the question on the Doping Control Form requesting the riders to provide their consent or otherwise in relation to the use of their sample post-analysis for research purposes on an anonymous basis was not fully explained to the riders by the DCOs. It was also observed that the DCOs allowed riders to leave the research field empty, without stating "yes" or "no" as they felt that this field was "optional" to answer. Interestingly, the vast majority of the riders did not agree to give their consent for the use of the samples for research purposes. On the Doping Control Form the research section of the form requires the rider to sign directly under the "yes" or "no" box. Given the rider signs at the bottom of the Doping Control Form outlining that all the information is correctly recorded perhaps the administration of this section could be slightly streamlined.

Recommendation 54: DCOs should be required to provide riders with adequate explanation about the value of consenting for their samples to be used for research purposes. In addition, WADA should reassess the requirement of athletes to explicitly state consent or otherwise for their samples to be used for research purposes given that the athlete is required to sign confirming that all information is correctly recorded at the conclusion of any testing session.

Chain of Custody Documentation

At the end of the collection phase, the DCOs completed a Laboratory Advice Form for the Laboratory, which included the name and date of the testing, the number of blood and urine samples collected, the coding numbers of the collected samples, the time of the collections, and the following information based on the testing circumstances: in-competition, out-of-competition, EPO, Passport and Other. This form was signed by the DCO, who retained the original copy and sent the second copy to the Laboratory. A second form with three copies (UCI, Transporter and Laboratory) indicated that the designated DCO had confirmed the number of samples, the destination of the samples and the method of transportation. It contained the signature of both the inspector and the transportation representative. World Courier would hand over to the DCOs a copy of the transportation waybill for the samples, which indicated the date, stage and location of departure, location of delivery for the samples, as well as the number of packages used to transport the samples to the Laboratory. In

addition, World Courier had the DCO complete a form listing the contents of the shipment for customs (nature of the samples, number of vials/tubes or quantity in ml) and a pro forma invoice.

The IO Team noted that the UCI did not use a specific chain of custody form but instead seemed to rely on a combination of the Laboratory Advice Form and the courier documentation which showed who handed the samples over to the courier, who received them and the collection and delivery times. For unannounced testing the samples were transported by the DCOs back to a central or specified point, combined and then handed over to the courier in one single batch. There was no documentation in place to record who possessed the samples at any given time, or where they were stored in between the actual collection to the exchange with the courier.

Recommendation 55: The UCI should consider either using the WADA template Chain of Custody Form or devising a UCI specific form to ensure that a full account of the ownership of the sample is recorded at all times.

Provision of Paperwork

The IO Team noted that as soon as the doping control sessions finished, all documentation relevant to the mission(s) was provided to the Lead DCO who then updated the TDP and emailed it to the UCI and the IO Team Chair. As stated previously, copies of all documentation were provided on a regular basis to the IO Team. The IO Team observed that the Lead DCO took photographs via his camera phone of all sample collection documentation which were then later uploaded to an internet server for the UCI to access. The sample collection paperwork for the last three days of the Tour was not photocopied and provided to the IO Team but instead the IO Team was provided with the direct links via email to a particular website, which was free of charge to access the photographs of the sample collection documents.

In accordance with the International Standard for Testing, all documentation relevant to a mission should be transported to the relevant Anti-Doping Organisation in a secure and timely manner and stored securely by the Anti-Doping Organisation. The IO Team was therefore concerned that such confidential documentation was being uploaded to what seemed an unsecure website. Documentation originating from a doping control session contains sensitive personal data and storage and/or processing must be in line with the International Standard for the Protection of Privacy and Personal Data and the applicable domestic law at all times. Once these photographs were uploaded there was also the need to ensure they are correctly disposed of.

The IO Team was made aware that this type of electronic transfer of documents is common and one of the quickest ways for people working away from an office to upload files to make them available to a third party. However, before using any such website, the website and location of the server should be closely investigated for security and confidentiality provisions before signing up to such service. It is also important to note that some countries have strict privacy laws that may allow the government access to such information should they require it. Many of these types of services are run by a host whereby the information is uploaded to a proxy server (not under the ownership of the receiving body) before being released to the third party via the website. When sending confidential documents in this manner as a minimum the information should be password protected and encrypted and not be held on a host server.

Recommendation 56: The UCI establish a more secure system for the safe transport of all documents electronically and prohibit unauthorised processing (reproduction, publication, etc.) of the personal data contained on the sample collection paperwork.

Education and Information

Under the World Anti-Doping Code, education to athletes is a mandatory requirement. The UCI outlined that all riders who participated in the Tour had to complete the Real Winner education module titled "True Champion or Cheat" (available on the UCI website) this year. This education module has now become a mandatory requirement for riders to obtain a UCI riders license. The UCI should be congratulated on the manner in which they have made this educational resource a mandatory requirement for its riders. In addition, anti-doping messages were provided at the Team managers' meeting by Tour director Christian Prudhomme, UCI President Pat McQuaid, the Lead DCO and French Gendarmerie representative Colonel Bourret.

However, it was observed during the Tour that there was no promotion of anti-doping (e.g. education and information) during the Tour either by way of public awareness, although the IO Team did observe a large banner on the side of Mt Tourmalet which said "No Doping". It was suggested by the IO Team that given the history of doping in cycling and on the Tour and the good work that the UCI has done in addressing this issue, that the Tour was a prime opportunity to promote the doping-free message to the millions of spectators that watch the race live and those that visit the pre-start village in the host town. The famous caravan that travels along the Tour ahead of the riders on race stages could also be a good opportunity to promote doping-free cycling through a well signed vehicle and the provision of information and doping-free messages.

Recommendation 57: The UCI maximise the opportunity of the Tour to promote the values of clean sport and to raise awareness of the efforts they are making to protect the sport of cycling from doping.

Summary of Non-Conformities & Key Recommendations

Non-Conformities

Non-Conformity 1: On one occasion, the IO Team observed that a partial sample was not sealed in accordance with the UCI protocols, but rather the sample was not sealed at all and was instead placed in view of the athlete and others in the hotel room where the collection had taken place. On checking the paperwork there was no record of there being a partial sample. This departure constituted a non-conformity with respect to the International Standard for Testing and had the potential to undermine the integrity of the sample in the case of an adverse analytical finding. This observation was referred to the UCI, resulting in instructions to seal, record and immediately refrigerate all samples, even partial ones, being provided to all the DCOs and that procedures for partial sample must be adhered to as well. In addition, the offending DCO was sent home and replaced.

Non-Conformity 2: There was one non-conformity noted in the doping control paperwork. On investigation, it was noted that a DCO noticed that after having signed the Doping Control Form with the rider present and then provided a copy of the form to the rider, that he had omitted to include some information related to the ABP the Doping Control Form. At this point the rider had left the station, although the rider's doctor was still present. The DCO requested the copy of the Doping Control Form from the rider's doctor and explained that he had omitted to include some information. The rider's copy was then inserted back under the original Doping Control Form and the missing information completed in the company of the rider's doctor. That said, the DCO did complete a Supplementary Report Form reflecting the incident.

Recommendations

Recommendation 1: The audit style IO Programme should be the format used for all future IO missions. The daily communication and feedback between the IO Team and the respective anti-doping organisation allows for continuous improvement of the anti-doping programme throughout the event.

Recommendation 2: Given the significance of the Tour to cycling and France, mediation talks should be scheduled as a matter of urgency between the UCI and the AFLD to establish how both parties might work closer together for the 2011 Tour. If either party is unwilling to engage in such talks then WADA should intervene and act as a facilitator to attempt to resolve such an impasse.

Recommendation 3: A member of the UCI anti-doping staff should be physically present for the duration of the Tour to act as liaison with the UCI office, Team Manager for the many people involved in delivering the anti-doping programme and to oversee all aspects of the anti-doping programme.

Recommendation 4: The Chaperones should be located in the same (or as close as can be accommodated) city or village as the DCOs and Medical Inspectors so as to enhance the ability of the Team as a whole to react quickly and effectively to test missions both early morning and late evening.

Recommendation 5: Chaperones should be reminded at the start of the Tour of the formal UCI process for registering inappropriate behaviour so they are equipped to deal with such situations.

Recommendation 6: The UCI should consider the implications of using retired or active Commissaires as DCOs and if they continue with this practice ensure that specific training acknowledging the different relationship is provided so as to ensure that the right balance of comfort, authority and independence is present during doping control.

Recommendation 7: The UCI should ensure that the staffing roster for anti-doping personnel includes sufficient pre-arranged time off from both testing and administration so as to allow for the work demands on the Tour and to keep personnel 'fresh'.

Recommendation 8: The UCI should take full responsibility for the appointment of Medical Inspectors for major UCI events so as to ensure that sample collection personnel have the required skills, qualifications and experience in anti-doping and are bound by suitable confidentiality agreements.

Recommendation 9: Where the Chaperones, DCOs and Medical Inspectors are required to work so closely together and where the success of the testing programme relies on all working in an integrated manner, a formal daily briefing/debriefing session should be put in place.

Recommendation 10: Due to the tight nature of the processing rooms and the need to ensure that sample provision is observed adequately, mirrors should be put up on the two solid toilet walls at an appropriate height to facilitate observation by the Medical Inspectors.

Recommendation 11: As an extension of the waiting area a tent should become a standard feature of the Station for all future events were the truck is used for doping control. In addition, the perimeter fencing surrounding the Doping Control Station should be covered with a type of fabric designed to provide the privacy for the riders selected for testing (with consideration given to using the fabric space to promote clean sport).

Recommendation 12: Where possible, the Doping Control Station area should be located towards the mid-point between the Finish Line and the end of the secure Post-Finish area for accredited people to assist with the flow of riders to doping control.

Recommendation 13: The good practice observed whereby the event organiser (in this case ASO) financially contributes to testing prior to their event be continued and the UCI and other International Federations consider such relationships with other major event organisers to support testing programmes in the lead up to the respective major event.

Recommendation 14: The UCI should continue to invest time and money in the Athlete Biological Passport (ABP) programme as it has the potential to radically change the way the UCI (and other Anti-Doping Organisations) conducts its anti-doping programme.
Recommendation 15: The UCI and WADA should consider the timing of releasing ABP date to riders to ensure that the UCI has time to review and act accordingly on any profiles that warrant further investigation and/or testing prior to the rider being afforded the same opportunity to look at their own profiles.

Recommendation 16: The route of passing intelligence via WADA to the IO Team should be used as a last resort with the ideal means by which such testing should be conducted being through a direct relationship between the respective National Anti-Doping Organisation and International Federation.

Recommendation 17: The UCI should consider the appointment of additional DCOs and Medical Inspectors to the Tour to allow for two teams to work separately on unannounced and Post-Finish testing.

Recommendation 18: With the amount and high quality of intelligence available to the UCI, it is critical that in the future a more varied, targeted and aggressive approach to catching cheating riders be a priority for the UCI. This should include, but not be limited to, increasing the number of anti-doping tests (rather than ABP), testing in less acceptable hours with a greater chance of detecting substances and/or methods with short detection windows and significantly limiting the use of a random draw so that all testing is based on intelligence and/or performance during the race (or at least test history prior to making random selections).

Recommendation 19: Target testing should always include an assessment of the various analyses the laboratory is able to conduct, including those 'new' to sport. During the Tour screens should routinely include EPO analysis.

Recommendation 20: To further develop their intelligence capabilities, the UCI should consider the benefits of implementing a Steroid Profiling Programme.

Recommendation 21: The UCI should continue to use a secure method of transmitting the TDP and further investigate the feasibility of encrypted communications should the UCI be required to transmit the TDP remotely.

Recommendation 22: DCOs should not disclose whether other riders are scheduled for testing during the same mission or that day as this information is confidential and carries a strong deterrent effect.

Recommendation 23: Where possible, for unannounced testing the anti-doping team arrives in a car which has no references/branding of the Tour and is not easily identified as such. Also, DCOs, Medical Inspectors and Chaperones should be encouraged to wear "normal", non-Tour clothes and instead use their ID cards as a means of identification to hotel reception and staff.

Recommendation 24: When conducting early morning or late evening testing that the DCOs, Medical Inspectors and Chaperones, wherever possible, have all the information in advance of arriving at the mission location and all documentation prepared so that they can enter the hotel immediately on arrival and proceed straight to notify the selected riders.

Recommendation 25: The provision of team room lists continues and the UCI to make it mandatory for teams to provide a detailed team rooming list for UCI officials, at a minimum at the hotel reception desk.

Recommendation 26: Chaperones/DCO's proceed straight to the riders' room and notify the rider and only then proceed to the team doctor's room and advise him of such testing. The procedure should be explained to the Teams in advance of the Tour in order to avoid any adverse reactions and comments from the team doctors.

Recommendation 27: The Chaperone should always confirm the name of the rider by requesting photographic identification immediately prior to notification. Further, on confirmation of the rider's identity, the Chaperone should require the rider to sign the notification section of the Doping Control Form as soon as practicably possible and before the rider enters the processing room.

Recommendation 28: The UCI require that rider license issued by National Federation include an appropriate photo of the rider so that the license can be used as a means of identification during doping control.

Recommendation 29: When a room is required for the testing of riders from more than one team all riders selected do not wait within the room where the processing of urine and collection of blood samples occur. The riders should wait directly outside the room or in another area where seating can be arranged under the direct supervision of the Chaperones.

Recommendation 30: The UCI should discuss with the ASO how guidelines can be provided to all hotels used on the Tour detailing the potential need for a temporary processing room and for each hotel to identify (and advise their staff accordingly) in advance of the preferred room for doping control activities.

Recommendation 31: Early morning testing should be conducted early enough to enable the collection of the first urine sample of the day, wherever possible. If notification occurs after a rider has awakened and urinated then if a sample cannot be provided prior to the rider departing to make the start of the race then target testing should follow at the next available opportunity.

Recommendation 32: If a drink is opened and left unattended it would be deemed best practice to ensure such drinks are discarded if it leaves the control of the rider who opened it. Whilst the rider is responsible for his own fluid intake the Chaperones could assist with ensuring the drinks are discarded if left or advising a rider if he is moving from this area to take his drink with him.

Recommendation 33: Chaperones should never provide open bottles of fluid to riders at any stage especially those not opened directly in front of the rider.

Recommendation 34: Police officers in the Post-Finish area of each stage should be briefed about the role of the Chaperone and are provided a visual of the UCI Chaperone bibs so that Chaperones are not impeded in fulfilling their role.

Recommendation 35: The UCI review the rule and practice related to the publication of the notification list for the Tour and reference to the list be removed for future Tours and that, where possible, Chaperones are part of every cycling event where Post-Finish testing occurs.

Recommendation 36: Where possible repetitious information be pre-completed on Doping Control Forms to be confirmed by the riders so as to speed up the process.

Recommendation 37: When more than one partial sample is provided, each time thereafter where an additional partial sample is provided which does meet the required volume it be combined with the existing partial sample into a new partial kit and total volume listed and that the maximum amount of urine is then put into the A & B bottles rather than just recording the minimum volume for each partial sample.

Recommendation 38: The room for the rider to extend the period from notification to sample provision should be closely managed and in instances where such a period is unusually long a supplementary report completed.

Recommendation 39: There should be an obligation to provide Medical Inspectors with the appropriate equipment in sufficient quantities to discard perforating waste on site, as well as give them instructions about their later destruction by a certified organisation.

Recommendation 40: In order to speed up the process and to make the process more efficient the Medical Inspector, after the rider has verified the number codes on the coded vials with the A and B safety seals and labels, should immediately stick the two coded labels on the two vials of blood to be collected.

Recommendation 41: The UCI should directly sign agreements (and thereby be responsible for monitoring the services provided) with all anti-doping Laboratories to be used for the analysis of samples collected during the Tour and include provisions for the expedited analysis of the samples.

Recommendation 42: The UCI consider the development of a standard policy regarding the long term storage of samples for its high profile events such as the Tour based on intelligence and performance at the time of the event.

Recommendation 43: To further enhance their anti-doping programme, the UCI should consider the merits of the UCI managing first instance hearings in relation to possible anti-doping rule violations on the Tour rather than delegate this results management authority to National Federations as is the current practice.

Recommendation 44: The UCI should reinvigorate discussions regarding a Code of Conduct for ProTeams with the intention of establishing a mutually agreement Code before the next season of Grand Tours.

Recommendation 45: The UCI request a DCO Report Form to be completed for every testing mission (post race; and morning/evening testing) so that an accurate record of the testing can be recorded on file and so that issues can be tracked and dealt with immediately during the event rather than after the event has concluded.

Recommendation 46: Doping Control Forms and other relevant documentation should be reviewed by the UCI representative on a daily basis and issues arising from any errors should be addressed immediately with the applicable DCOs.

Recommendation 47: Rider selections, including those from random draws, should be recorded on a Selection Criteria Form or on a daily report which the DCO completes on receipt of instructions from the UCI for each testing mission and is then signed by the DCO for tracking and record purposes.

Recommendation 48: The UCI utilise the notification section of the Doping Control Form and provide waterproof folders to the Chaperones to ensure the paperwork remains in good condition regardless of the weather.

Recommendation 49: Only the person formally notifying the rider should sign the In-Competition Notification Form or the notification section of the Doping Control Form, thereby clearly identifying who notified the rider.

Recommendation 50: The UCI to consider Chaperones being responsible for the entry and exit details for their specific riders and riders' representative leaving the security guard to be solely responsible for policing access to the Station area.

Recommendation 51: The UCI consider the use of a doping control access pass which the Chaperone could provide to the rider and his representative at the point of notification to assist the security guard in indentifying who can enter the Station.

Recommendation 52: WADA to confirm with Anti-Doping Organisations whether there is a requirement to record the actual value of specific gravity or whether a 'yes/no response is sufficient.

Recommendation 53: Riders are explicitly encouraged by the DCOs to list the actual substances (drugs and supplements) they have taken in the specified period rather than just referring to ADAMS, existing TUEs or Declarations of Use.

Recommendation 54: DCOs should be required to provide riders with adequate explanation about the value of consenting for their samples to be used for research purposes. In addition, WADA should reassess the requirement of athletes to explicitly state consent or otherwise for their samples to be used for research purposes given that the athlete is required to sign confirming that all information is correctly recorded at the conclusion of any testing session.

Recommendation 55: The UCI should consider either using the WADA template Chain of Custody Form or devising a UCI specific form to ensure that a full account of the ownership of the sample is recorded at all times.

Recommendation 56: The UCI establish a more secure system for the safe transport of all documents electronically and prohibit unauthorised processing (reproduction, publication, etc.) of the personal data contained on the sample collection paperwork.

Recommendation 57: The UCI maximise the opportunity of the Tour to promote the values of clean sport and to raise awareness of the efforts they are making to protect the sport of cycling from doping.

Appendix 1 - Members of Independent Observer Team & UCI Personnel

Independent Observers

The IO Team was comprised of two teams of three members each (each team comprising a Chair, a member of WADA staff and one other, see Appendix 1 for details). Team 1 handed over to the second team on 12 July which concluded its work on 25 July.

Team	Name	Title	Nationality
1	Andy Parkinson (Chair)	Chief Executive, UK Anti-Doping	GBR
1	Olivier Grondin	National Anti-doping Coordinator Doctor, AFLD	FRA
1	Julien Sieveking	Senior Manager, Legal Affairs, WADA	SUI
2	Tim Ricketts (Chair)	Anti-Doping Manager, International Rugby Board	AUS
2	Michael Petrou	President, Cyprus Anti-Doping Authority	CYP
2	Emiliano Simonelli	Senior Manager, Code Compliance, WADA	ITA

UCI Personnel

Name	Title
Magali Louis	In-Competition Testing Coordinator, Cycling Anti-Doping Foundation
Francesca Rossi	Director, Cycling Anti-Doping Foundation
Mario Zorzoli	UCI Doctor/Scientific Counsellor
Olivier Bañuls	Operations and Project Manager Cycling Anti-Doping Foundation
Enrique Gonzalez Martinez	Lead Doping Control Officer
Michel Rivière	Doping Control Officer
Germano Casorotti	Doping Control Officer
Claude Deschaseaux	Doping Control Officer
Jean Claude Witkowski[16]	Chaperone Coordinator / Chaperone

[16] Appointed by ASO

Appendix 2 - WADA Resolution

Resolution from the World Anti-Doping Agency in relation to the request made by AFLD to conduct additional testing on the 2010 Edition of the Tour de France

1. Facts

1- On May 12, 2010, AFLD requested the authorization from UCI to conduct approximately 60 additional tests during the 2010 Edition of the Tour de France.

2- UCI refused such request by a letter addressed to AFLD on May 18, 2010.

3- On June 1, 2010, AFLD wrote to WADA to ask permission to conduct approximately 60 additional tests during the 2010 Edition of the Tour de France on the basis of Article 15.1.1 of the World Anti-Doping Code (Code). On that day, AFLD did not notify UCI of its request to WADA.

4- On June 1, 2010, WADA notified UCI of the request it had received from AFLD, and asked for an answer within seven days, as per the protocol for Article 15.1.1.

5- On June 8, 2010, UCI answered WADA and explained its position in relation to its refusal to allow AFLD to conduct additional testing. UCI raised some procedural issues, in particular the fact that it had not been notified by AFLD directly on June 1.

6- On June 9, AFLD notified UCI of its letter sent to WADA on June 1, 2010.

7- On June 9, WADA informed UCI it would give it another seven days to provide any additional comments in order to formally respect the protocol of Article 15.1.1 after notification from AFLD.

8- On June 16, UCI informed WADA that it had no further comments

9- This resolution is rendered by WADA within 7 days of the last information received from UCI.

2. Arguments of the parties

10- Arguments from AFLD

a. AFLD claims that it should be authorized to conduct additional testing, given that it has access to confidential information from police and customs that it cannot share with other organizations. Such information will allow AFLD to target test specific riders during the Tour de France but will not be available directly to UCI because of legal issues.

b. AFLD is ready to cooperate with UCI to avoid the inconvenience of having two entities testing at one single event.

c. AFLD raises concerns about UCI conducting unannounced testing.

11- Arguments from UCI

a. UCI raises some formal issues in relation to the AFLD request.

b. UCI is also invoking some previous problems with AFLD which in its view would justify WADA not to grant permission to AFLD to conduct extra testing.

c. UCI presents it's testing plan for the 2010 Tour de France, and argues that this plan is comprehensive and can be adapted based on the needs. UCI, in particular, indicates that it is open to conduct testing on any rider that would be requested by AFLD on the basis of the confidential information received by AFLD, provided this information is given to WADA.

d. On that basis, UCI doesn't see why AFLD should conduct tests itself during the event.

e. UCI claims that, if permission were granted to AFLD on the basis that it holds confidential information, this might lead to other anti-doping organizations (ADOs) getting authorization to test at the event, and therefore in having multiple ADOs testing at the same event.

f. UCI raises logistical issues in relation to having two organizations testing at the same event.

g. UCI also raises the issue of the French anti-doping law not being fully Code compliant, and the issue of having a decision rendered in France which will have to be recognized later on by UCI, and which potentially could be in contradiction, given that the final appeal in France is to the State Council and the final appeal under the Code is to the Court of Arbitration for Sport (CAS).

h. On that basis, UCI refuses to grant permission to AFLD to conduct testing.

3. Discussion

12-WADA has given due consideration to the arguments raised by both parties. Following the response from UCI, additional information was sought from both parties on June 10, and the responses to such request have also been fully studied and taken into account in this resolution.

13- WADA sees no procedural or formal issue in this matter. The claim from UCI that it was not notified by AFLD on the day AFLD sent its request to WADA has been fully cured by the fact that UCI was notified on June 9, and that, subsequently, an extended deadline was given to UCI by WADA.

14- WADA does not consider that previous issues between UCI and AFLD should be taken into account in the making of this resolution.

15- WADA understands that AFLD has intelligence from the French police and customs which could be useful to target test riders during the tour.

16- WADA signed a confidentiality agreement under which AFLD is able to share some of this information with WADA.

17- WADA is satisfied that this information appears prima facie realistic and useful to conduct target testing on some riders.

18- UCI offered to target test riders upon request from AFLD. This suggested approach would be potentially very useful as it would avoid having two different organizations testing at the same event, while allowing accurate target testing to take place.

19- WADA is concerned that testing conducted by AFLD will necessarily fall under French law, which is not, to date, fully Code compliant. Having UCI perform such extra tests upon request from AFLD will ensure that results management for all tests will be conducted under UCI rules, which are Code compliant and provide for a final appeal to CAS.

20- The unannounced component of testing is vital in ensuring target testing is successful.

21- WADA does not speculate on the unannounced nature of UCI tests but considers that it is of primary importance that all tests be conducted in total transparency and thereby avoid any subsequent criticism of being pre-warned. WADA thinks that such assurance would benefit all parties and the public at large.

4. Resolution

22-WADA does not give permission to AFLD to conduct additional testing at the Tour de France. This resolution is however subject to the following conditions:

a) Because of the acceptance of UCI to conduct extra testing if information warrants it, WADA requires of AFLD to be informed of any target test that it might suggest be conducted as a result of the receipt of confidential information.

b) Upon receipt of this information, and after evaluation of the background information related to such request, WADA will pass such request to its Independent Observer (IO) team present on site during the Tour de France in order to appropriately manage the issue of confidentiality, and for the IO team to pass it on to UCI as follows :

i. The IO team will ask a UCI doping control officer (DCO) to conduct the specific target testing mission(s) by first contacting the UCI designated DCO and agreeing on a place and time to meet.

ii. A representative of the WADA IO team will then go with the UCI DCO and the UCI chaperone to collect the sample.

iii. The WADA IO team representative will only inform the UCI DCO and UCI chaperone of the name of the rider at the appropriate time in accordance with its own appreciation of the circumstances.

iv. There should be no communication to any external parties from the UCI DCO and the UCI chaperone from the time they meet the WADA IO team representative until the mission is fully completed.

v. All samples collected during these missions should be analysed for EPO and hGH.

c) If for whatever reason(s) the above mentioned conditions are not acceptable to UCI, or are not respected during the Tour de France, WADA will grant the AFLD the permission to perform such tests itself.

Montreal, June 22, 2010
John Fahey, President

Appendix 3 –Testing Statistics

Pre-Tour

Analysis	No. of Samples[17]
Urine	768
Blood	127
ABP	993
Total	1888

The Period of the Tour

The below statistics relate to the period of Tour as defined by the UCI Rules.

Type	Analysis	No. of Analyses[18]
Urine	Standard only	65
Urine	Standard + EPO	144
Urine	IRMS	30
Urine	Other	12
Blood	hGH only	33
Blood	ABP only[19]	124
Blood	CERA only	32
Blood	HBT	26
Blood	ABP (samples collected three days before the Prologue)	198
Total		

[17] This figure reflects the number of samples collected and not the number of riders tested

[18] This figure reflects the number of analyses conducted and not the number of riders tested