Strategic Testing Expert Advisory Group
Virtual Meeting

Summary of Outcomes and Recommendations

17 May 2023

Dear Colleagues,

The World Anti-Doping Agency’s (WADA’s) Strategic Testing Expert Advisory Group (STEAG) met virtually on 3 and 13 April 2023 and focused its discussions on the following main topics:

- Additional measures to improve the identification of athletes when being tested and considering criteria to mandate the long-term storage of samples as part of an effort to prevent and/or detect doppelgangers and achieve greater harmonization for Anti-Doping Organizations (ADOs) around these two areas;

- The ADAMS enhancements planned, developed and released over the last six months, including the creation of the ADAMS Testing Working Group, an update on the 2023 WADA IT Roadmap and the DCO Central paperless application;

- The results of an initial analytical review of the revised criteria for suitable Specific Gravity (SG) of a urine sample that were included in the International Standard Testing and Investigations (ISTI) in 2020;

- Updates on the Athlete Biological Passport (ABP) and Dried Blood Spot (DBS) implementation;

- The creation of a Working Group of members from the STEAG that will conduct a partial review of the Technical Document for Sport Specific Analysis (TDSSA) to consider any improvements following eight (8) years of its implementation by ADOs, as well as a new Working Group that will assist with further development of DBS project; and


The main outcomes of the meeting and recommendations are outlined below:

1. **Measures for the Identification of Athletes and Criteria for Mandatory Storage of Samples**

   The STEAG continued the discussion on measures to prevent and/or detect doppelgangers, as requested by the WADA Executive Committee following WADA’s investigation into anomalies concerning the anti-doping program of the International Weightlifting Federation. The STEAG discussed the requirements for greater harmonization around the type of photo identification required to be shown by athletes at the time of testing, the criteria around any third party identification as well as the possibility of taking a photograph of the selected athlete during a sample collection session.
under certain circumstances to assist in validating the athlete’s identity. Requirements around the athlete photograph section within the athlete profile section of the ADAMS was also discussed and how this could be improved to assist with identifying athletes as well.

It was also acknowledged by the STEAG that further guidance may be welcomed by some ADOs concerning the long-term storage of samples and further analysis strategies. Any mandatory criteria should be scientifically driven and based on the relevant sport risk. The STEAG discussed potential increased compliance monitoring criteria for ADOs with regards to their further analysis strategy. The STEAG will continue discussing both athlete identification and long-term storage and further analysis at its next meeting planned for the second half of 2023 with any proposed changes to these areas to be part of the ISTI review and consultation process.

➢ Outcome/Recommendation No 1:

- a) Criteria for athlete and third-party identification should be developed so the process is consistent among all ADOs and athletes. It is recommended that the photo of the athlete in the ADAMS Athlete profile section has set requirements established for type of photograph uploaded and is kept up-to-date to assist ADOs and Sample Collection Personnel with the identification of the athlete. ISTI Article 5.3.4 to be potentially enhanced to include further guidance on the acceptable criteria of the athlete identification subject to consultation with all stakeholders.

- b) Any mandatory criteria for sample long-term storage should be based on the recommendations of the laboratories and Athlete Passport Management Units (APMU) as well as any other credible information or intelligence. If needed and approved, ISTI Article 4.7.3 to be enhanced.

2. ADAMS Enhancements, the 2023 WADA IT Roadmap and the DCO Central Paperless Application

The STEAG received an update on the latest ADAMS enhancements and the content of the 2023 WADA IT Roadmap that includes the launch of the Next Gen Athlete Biological Passport (ABP) module, and new functionality on the selecting and reporting of samples stored long-term (beyond three months), to be released in the summer of 2023. The STEAG was also informed of the latest development of an Application Programming Interface (API) that will connect ADAMS with other systems for a fee and as a result, ADOs, that are using these systems, can expedite ADAMS upload to meet compliance requirements and will avoid duplicating the entry of Doping Control Forms (DCFs).

A proposal to improve the communication and tracking of samples requested for quick turnaround sample analysis (less than the 20 days) to laboratories in ADAMS was proposed by WADA to assist in the management of samples for athletes that may be competing in major events.

WADA also updated the STEAG on the creation of the ADAMS Testing Working Group (ATWG) that will provide expert advice and recommendations to WADA’s Testing Department and to the Agency’s Information Technology (IT), Data and Digital Development Department on the use of ADAMS and its ecosystems as it relates to the planning, conducting, monitoring and reporting of testing by Anti-Doping Organizations (ADOs). The ATWG consists of anti-doping experts who are regular users of the ADAMS ecosystems and who have operational experience in the testing activities of an International Federation, a National or a Regional Anti-Doping Organization.
Finally, the STEAG was informed of the latest developments on WADA’s paperless application (DCO Central) and the outcomes of the relevant workshop dedicated to DCO Central new and existing users, and feedback received about sample collection equipment, during the 2023 WADA Annual Symposium.

- **Outcome/Recommendation No 2:**

  The STEAG recommended that the development of further functionality enhancements of DCO Central is prioritized by WADA and appropriate resources are allocated to this project to work towards greater implementation of paperless doping control for sample collection in the future and that the improved tracking system for samples requiring fast turnaround analysis in ADAMS also be part of future enhancements for ADOs and laboratories.

3. **Analytical Review of the revised Criteria for a Suitable Specific Gravity (SG)**

   In March 2020, the criteria for a suitable SG of a urine sample for analysis were revised and finalized in the ISTI as follows: For Samples with a minimum volume of 90 mL and less than 150 mL, specific gravity measured at 1.005 or higher with a refractometer, or 1.010 or higher with lab sticks. For Samples with a volume of 150 mL and above, specific gravity measured at 1.003 or higher with a refractometer only. After three (3) years of implementation, WADA conducted an initial analysis on the relevant ADAMS data that indicates that two (2) out of three (3) urine samples that had not met the previous criteria for suitable SG (i.e., had been considered dilute prior to the criteria change), were meeting the revised criteria. Overall, in the past three (3) years more than 14,000 sample collection sessions were completed without requesting an additional sample compared to the previous acceptance criteria. This change which was supported by WADA’s Laboratory Expert Group has resulted in significant savings to ADOs and less time for athletes spent in doping control. There was no impact to the level of detection of prohibited substances due to such changes.

4. **ABP and DBS projects**

   WADA’s ABP team updated the STEAG on the latest developments on the Steroidal Module of the ABP that will be applied not only on urine samples but also venous blood samples (serum)\(^1\) and is anticipated to be particularly valuable in detecting abuse of testosterone and related compounds in female athletes. In addition, the STEAG received an update on the Endocrine\(^1\) Module of the ABP that aims to improve hGH detection sensitivity through longitudinal profiling of two hGH biomarkers over time. Both modules will be available in the summer of 2023 when the relevant ADAMS Next Gen ABP module is launched. FAQs will be developed to assist ADOs in the implementation of these modules. Additionally, the STEAG was informed of a research pilot project that aims to validate a new tool within the Steroidal Module of the ABP to detect urine exchange (e.g., through the use of doppelgangers) that can then be confirmed by DNA analysis.

   On the DBS project, the STEAG agreed to play a more active role in DBS implementation strategies since the conclusion of the DBS Steering Committee in late 2022. A STEAG DBS sub-group will be looking into the creation of a testing strategy for DBS samples focusing on the current analytical capacity and will liaise directly with the Technical DBS Working Group that will be looking at a wider and harmonized implementation of DBS analysis in WADA-accredited Laboratories, and will provide

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1 This new method is not mandatory to implement i.e., applied upon ADO’s request and laboratory availability.
expert advice, recommendations, and guidance to WADA Management with regards to the further development of DBS analysis and harmonization of DBS sample collection equipment. The Technical DBS Working Group will report to the Laboratory Expert Advisory Group.

➢ **Outcome/Recommendation No 3:**
  
a. The STEAG will assist with the development of FAQs on the two new ABP modules regarding relevant testing strategies.
  
b. The STEAG will develop testing strategies (e.g., Testing Guide) on the use of DBS samples by ADOs.

5. STEAG Working Group to review the Technical Document for Sport Specific Analysis (TDSSA)

The TDSSA came into force in 2015 and is now part of all ADOs’ testing program. After eight (8) years of implementation, the STEAG agreed to conduct a review of the TDSSA to explore areas that may require revision based on the analysis of ADAMS data. A Working Group consisting of five members from the STEAG and WADA staff will analyze existing ADAMS data and provide initial recommendations for any proposed TDSSA changes to the STEAG at its next meeting planned for the second half of 2023. As in the past, any significant changes to the TDSSA will be shared with ADOs for consultation.

➢ **Outcome/Recommendation No 4:**

The STEAG WG will review the 2015-2023 ADAMS data and provide initial recommendations for any proposed changes to the TDSSA at the next STEAG meeting planned for the second half of 2023.

6. Timeframes for the global review process of the ISTI

The STEAG was informed of the proposed timeframes for the review process of the 2021 World Anti-Doping Code and the International Standards (including the ISTI) which will begin in the last quarter of 2023. The ISTI will be renamed the IST due to a new International Standard for Intelligence and Investigations being developed as part of the upcoming global review of the 2021 World Anti-Doping Code and International Standards which will come into effect on 1 January 2027.

We hope you find this update useful and should you have any comments or questions regarding the above, please contact WADA at testing@wada-ama.org.

Thank you for your continued commitment to clean sport.

Yours sincerely,

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