

# **Reporting Guide to Monitor Testing**

**Version 1.0**  
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## 1. Introduction

On 2 October 2014, the World Anti-Doping Agency (WADA) published the Technical Document for Sport Specific Analysis ([TDSSA](#)), which is intended to ensure that Prohibited Substances within the scope of the TDSSA are subject to an appropriate and consistent level of analysis by all Anti-Doping Organizations (ADOs) that conduct testing in the relevant sports and disciplines. Compliance with the TDSSA is mandatory under article 5.4.1 of the World Anti-Doping Code (Code); and, since 1 January 2016 WADA has been monitoring implementation of the TDSSA closely.

On 1 June 2016, following a decision by WADA's Executive Committee, it became mandatory for ADOs to enter all Doping Control Forms (DCFs) into the Anti-Doping Administration and Management System (ADAMS) no later than 15 business days after sample collection.

As both TDSSA implementation and entry of DCFs into ADAMS are mandatory, WADA monitors them closely from a Code compliance perspective, including via the Code Compliance Questionnaire (CCQ). Failure to comply with these requirements can result in a declaration of non-compliance.

WADA developed this new Reporting Guide to Monitor Testing in order to assist ADOs with these compliance requirements. The Guide provides step by step instructions to:

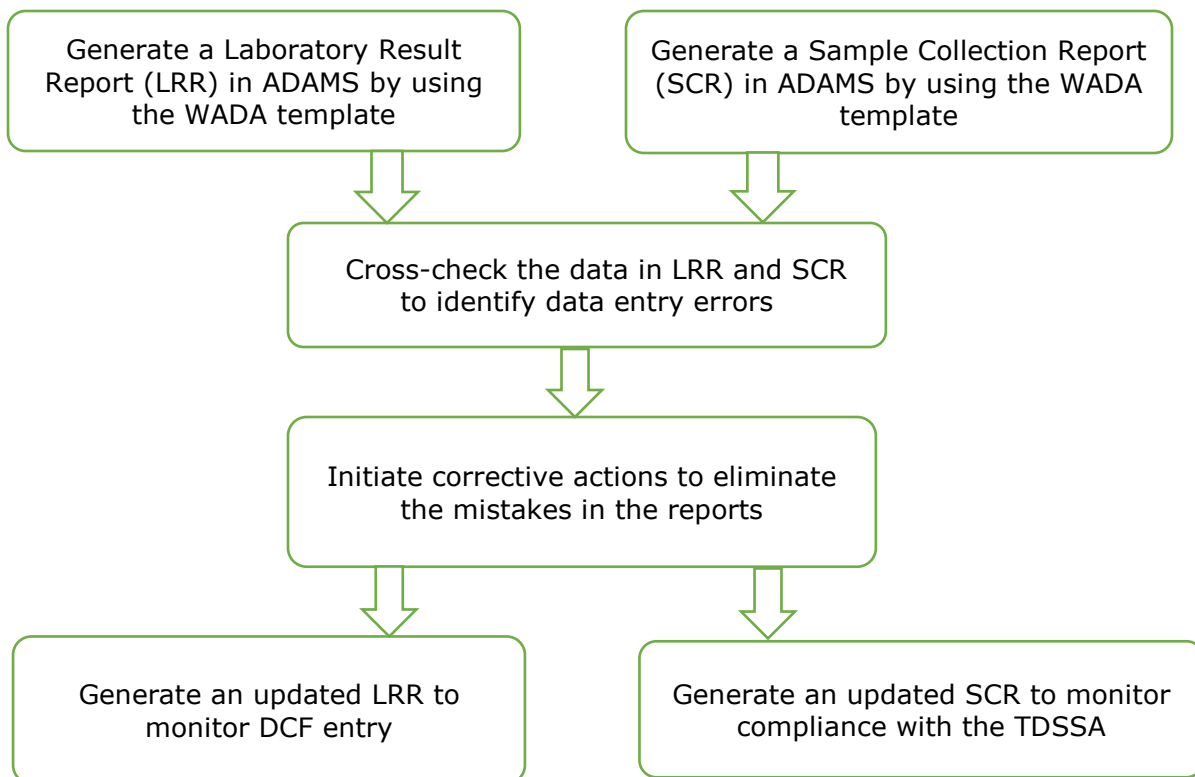
- generate relevant reports in ADAMS;
- cross check the data and;
- take the necessary action to eliminate any data entry errors

so that ADOs can monitor their compliance with the TDSSA and DCF entry based on accurate testing data.

There are various ways to determine the number of tests and analyses from the ADAMS reports. This Guide illustrates only a basic way to perform the exercise. For instance, ADOs may use pivot tables, macros and other formulas such as vlookup in Excel to extract the relevant figures based on the principles outlined in this Guide.

Internet Explorer 11 and Microsoft Excel 2016 were used to create the screenshots and the instructions in this Guide. The procedures may be slightly different on other web browsers and different versions of Microsoft Excel.

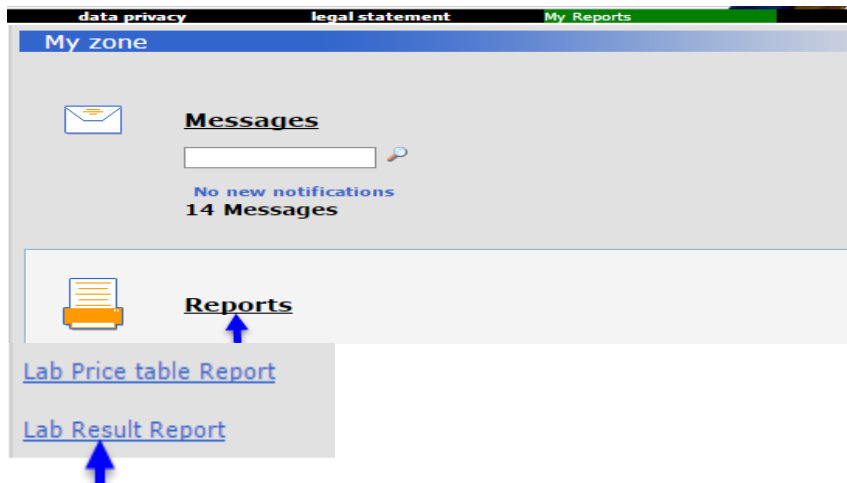
All ADAMS templates recommended in this Guide are created in the current ADAMS system and require some manual handling of data to identify the missing or wrong information, if any, and to extract the relevant figures for compliance monitoring. Enhanced reporting functions will also be part of the New Generation ADAMS, which is in development, to simplify the monitoring process in the near future.

**Overview of the monitoring process:**

## 2. Generate a lab result report (LRR) in ADAMS

The LRR retrieves information from the sample analysis results that are submitted by Laboratories in ADAMS.

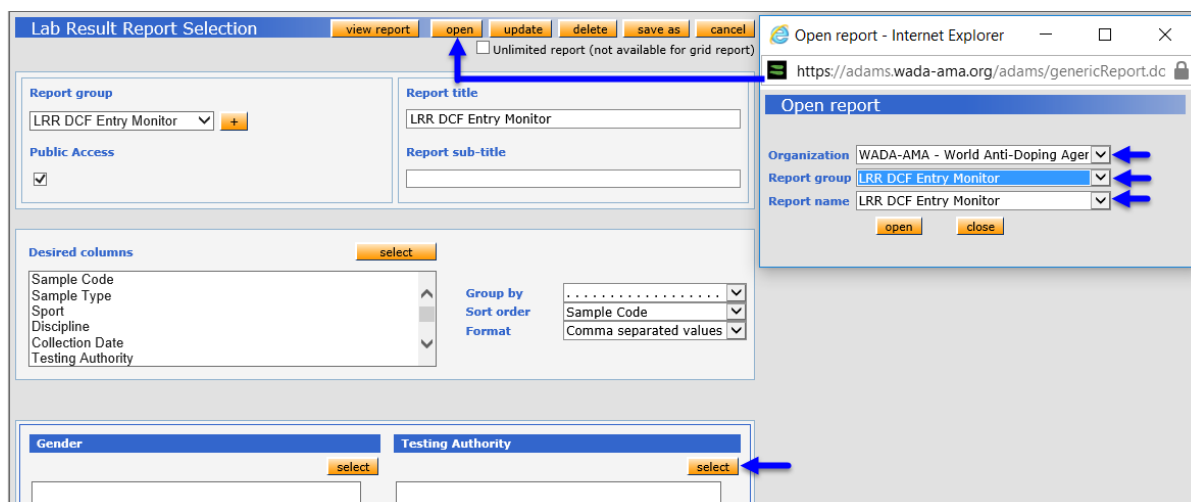
- 2.1 Choose the **Lab Result Report** in the **Reports** module on the *ADAMS main* page.



- 2.2 Open the existing template created by WADA.

- Click **open** at the top right corner of the *LRR* page.
- In the pop-up<sup>1</sup> *Open report* window:
  - Select **WADA-AMA** in the *Organization* field;
  - Choose **LRR DCF Entry Monitor** in the *Report group* field;
  - The name of the template **LRR DCF Entry Monitor** will appear in the *Report name* field.
- Click **open** to open the template.

- 2.3 Click **select** to choose your organization in the *Testing Authority* field and then click **save**.



<sup>1</sup> ADAMS requires pop-ups to operate properly. Please ensure that your browser allows pop-ups coming from <https://adams.wada-ama.org/adams/>

- 2.4 Specify the **Collection Date** range to define the scope of data to be included in the report. This can be done by either typing a date in the *from/to* fields or selecting from the pop-up calendar.

**Collection Date**

from 01-Jan-2016

to 31-Dec-2016

December, 2016

wk	Mon	Tue	Wed	Thu	Fri	Sat	Sun
48				1	2	3	4
49	5	6	7	8	9	10	11
50	12	13	14	15	16	17	18
51	19	20	21	22	23	24	25
52	26	27	28	29	30	31	

Select date

- 2.5 Click **view report** at the top or bottom of the LRR page to launch the report and start retrieving data.

**Lab Result Report Selection**

view report open update delete save as cancel

☐ Unlimited report (not available for grid report)

**Report group**

LRR DCF Entry Monitor +

**Public Access**

☒

**Report title**

LRR DCF Entry Monitor

**Report sub-title**

- 2.6 A *Report has been launched* window will pop up. Click on **go to My Reports** to proceed to *My Reports* page.

Report has been launched - Internet Explorer

https://adams.wada-ama.org/adams/genericReport.do

**Report has been launched**

Your request to run this report has been submitted and the report output will be generated soon.

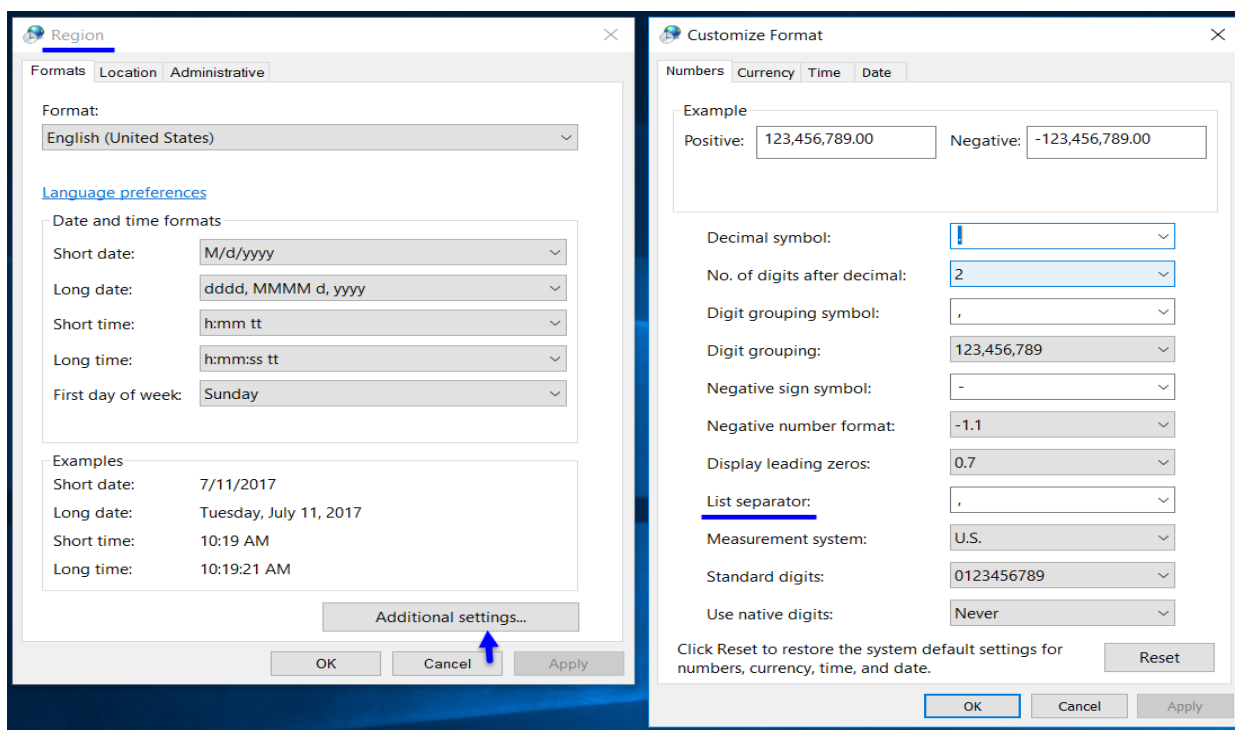
After the report output has been generated, you will be able to retrieve it in the My Reports window.

OK go to My Reports

- 2.7 Open and view the completed LRR.
- Use the **Refresh** button to refresh *My Reports* page if the report is not yet completed after the page is open.
  - Click on the **Completed** status icon and the report will open as a CSV file.

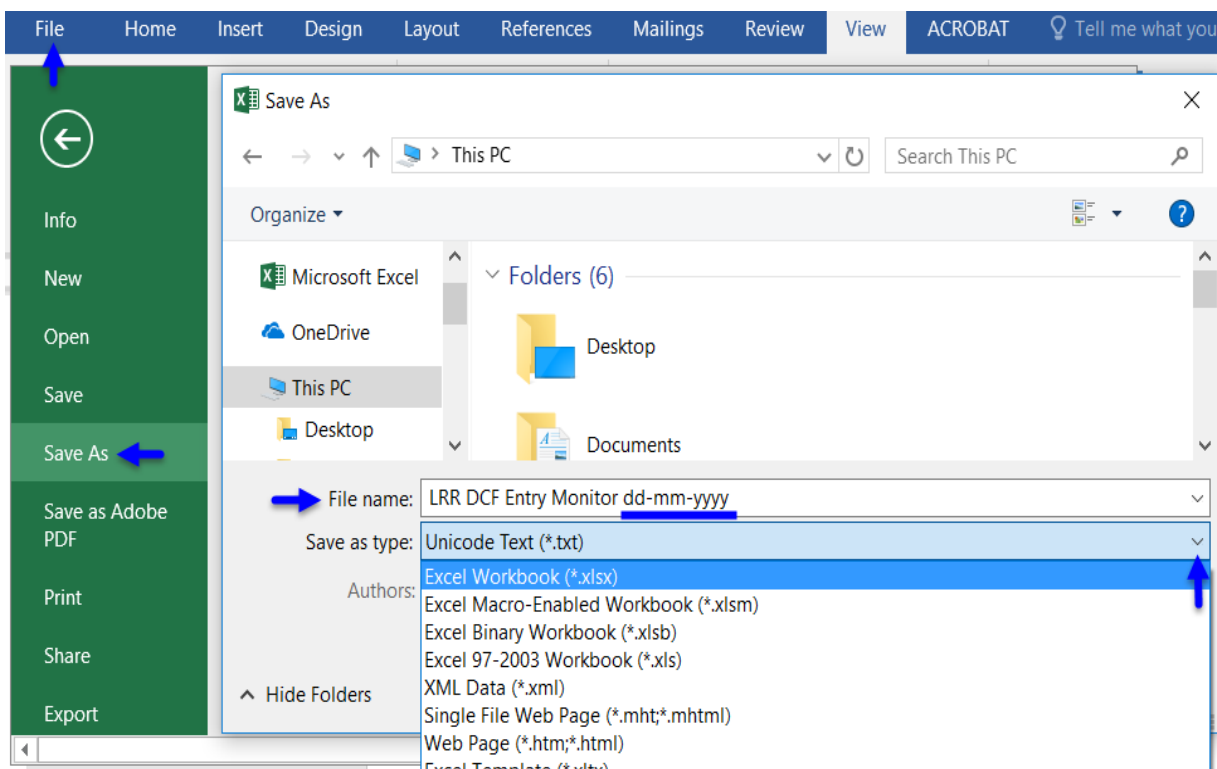
My Reports					Refresh	close
<input type="checkbox"/> Select all	Delete the selected reports					
Type of report	Report title	Date	Status	Days until auto-deletion		
<input type="checkbox"/> Lab Result Report Selection	LRR DCF Entry Monitor	07-Jul-2017	Completed	7		

- c) If the data are clustered in the first column of each row in the CSV file, you will need to change the **List separator** setting in your computer and then open the CSV file again. Go to Control Panel-Region-Additional settings. Set List separator value to comma “,” as shown in the screenshot below. Open the csv file again and it will look as a properly formatted spreadsheet.



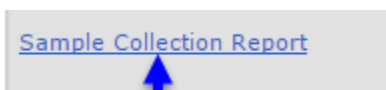
## 2.8 Convert the CSV file to an Excel spreadsheet:

- When the CSV file is opened, click the **File** tab at the top left corner of the Excel window and select **Save As**.
- Click the drop-down menu to the right of *Save as type* and choose the **Excel Workbook (\*.xlsx)** option at the top of the list.
- Type a **name** for the new file in the *File name* field, then click on **Save**.
- It is suggested to add the date when the report is generated in the name of the file to track data extracted from ADAMS on different days.



### 3. Generate a sample collection report (SCR) in ADAMS

- 3.1 Back in ADAMS, choose the **Sample Collection Report** in the **Reports** module on the *ADAMS main* page.



- 3.2 Open the existing template created by WADA:
- Click **open** at the top right corner of the *SCR* page.
  - In the pop-up *Open report* window:
    - Select **WADA-AMA** in the *Organization* field;
    - Choose **SCR ADO Statistics Report** in the *Report group* field;
    - The name of the template **SCR ADO Statistics Report** will appear in the *Report name* field;
    - Click **open** to open the template.
- 3.3 Click **select** to choose your organization in the *Testing Authority* field and then click **save**.
- 3.4 Specify the **Collection Date** range to define the scope of data to be included in the report. This can be done by either typing a date in the *from/to* fields or selecting from the pop-up calendar.



The screenshot shows the ADAMS interface with three main sections:

- Date of test:** Includes 'from' and 'to' date pickers. The 'to' picker is open, showing a calendar for December 2016. A blue arrow points to the calendar.
- Sport/Discipline:** Includes a search bar and a 'remove' button.
- Testing Authority:** Includes a search bar and a 'select' button. A blue arrow points to the 'select' button.

- 3.5 Click **view report** at the top or bottom of the SCR page to launch the report and start retrieving data.
- 3.6 Open and view the completed SCR.
  - a) Use the **Refresh** button to refresh *My Reports* page if the report is not yet completed after the page is opened.
  - b) Clicking on the **Completed** status icon will open the report as a CSV file.
- 3.7 Open the report as a CSV file and convert it to an Excel spreadsheet as explained in section 2.8.

#### 4. Identify and correct mistakes in ADAMS reports

ADOs are recommended to generate a LRR and a SCR to verify the accuracy of the analysis data related to their organization on a regular basis (i.e. monthly) so that corrective actions are initiated in a timely fashion to address the data entry errors in ADAMS, if any, before further compliance monitoring can be conducted. Such checking and correcting exercise is also important to ensure that ADOs' testing data are accurately reflected in the global [Anti-Doping Testing Figures](#) Reports.

The LRR generated by following the instructions in Section 2 of this Guide contains the results of all urine and blood samples reported by the laboratories in ADAMS with your organization as the Testing Authority (TA). Athlete Biological Passport (ABP) blood sample results are not included in this LRR and those results can be extracted separately from a biological result report in ADAMS if needed.

The SCR generated by following the instructions in Section 3 of this Guide contains all urine and blood samples for which your organization has created the Doping Control Forms (DCFs) in ADAMS and is recorded as the TA.

ADOs should verify the sample codes in the two reports against one another.

For a small number of samples, an easy way could be sorting the sample codes from smallest to largest in both reports, copy them to two columns next to each other in one Excel worksheet and then compare the codes in the same row. See the illustration below.

A	B
LRR Sample Codes	SCR Sample Codes
1111	Sort Smallest to Largest
2222	Sort Largest to Smallest
3333	Sort by Color
4444	Clear Filter From "SCR Sample Codes"
5555	Filter by Color
6666	Number Filters
7777	Search
9999	(Select All)
...	

A	B
LRR Sample Codes	SCR Sample Codes
1111	1111
2222	2222
3333	3333
<b>4444</b>	5555
5555	6666
6666	7777
7777	<b>8888</b>
9999	9999
...	...

Sample in LRR is missing in SCR.

Sample in SCR is missing in LRR.

For a large number of samples, it is recommended to use the "vlookup" formula in Excel. See the following video which demonstrates how to use this formula to verify if the LRR samples are in the SCR:

[https://www.wada-ama.org/sites/default/files/video\\_on\\_vlookup.mp4](https://www.wada-ama.org/sites/default/files/video_on_vlookup.mp4)

LRR Sample Codes	Sample found in SCR?
1111	=VLOOKUP(A14,B1:B11,1,FALSE)
2222	VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup])
3333	3333
<b>4444</b>	#N/A
5555	5555
6666	6666
7777	7777
9999	9999
...	...

Insert this new column in LRR next to sample codes.

Sample in LRR is missing in SCR.

The four arguments in the vlookup fomula are:

1. Lookup\_value: the cell to the left of the formula, containing the sample codes in LRR;
2. Table\_array: the sample codes column in the SCR;
3. Col\_index\_num: 1;
4. [range\_lookup]:FALSE (exact match)

#### 4.1 Check the sample codes in the LRR against the SCR.

Check whether all the sample codes in the LRR are included in the SCR. If some sample codes included in the LRR are missing from the SCR, the DCFs may not have been created yet in ADAMS for very recent tests within 15 business days (the results are reported by the laboratory before the DCFs are entered by the ADO), or there could be a mistake in the TA field in the laboratory result created by the laboratory.

##### Corrective Actions for the ADOs:

- Refer to your own files to verify if you had a testing mission at the date corresponding to the collection dates of the missing sample codes. If so, verify your documentation to ensure that all the DCFs were created in ADAMS. Refer to Section 5 of this Guide for more information.
- If the sample that is missing in the SCR is a double blind sample for the laboratory quality control purpose, you should remove this sample from the LRR.
- If you have no mission corresponding to the collection dates of the missing codes, the samples probably do not belong to your organization. Contact the laboratory to ask them to verify the TA on the original copy of the corresponding DCFs or the chain of custody and to modify the TA in the laboratory result in ADAMS accordingly.
- In some cases, the Sample Collection Authority (if different from the Testing Authority) may need to be contacted to provide clarification on the information included on the DCF original copy.

#### 4.2 Check the sample codes in the SCR against the LRR.

Check whether all urine and blood sample codes in the SCR are also included in the LRR. If some sample codes included in the SCR are missing from the LRR, the laboratory may not have reported the results yet in ADAMS (normal pending results) or there could be a mistake in the TA field in the laboratory result. The samples that are not found in the LRR could have been reported under another ADO by the Laboratory.

##### Corrective Actions for the ADOs:

- Refer to your mission documentation to ensure the sample codes from the SCR are correct. Refer to Section 5 of this Guide for more information. If it has been more than 10 working days since the sample were received by the laboratory (Article 5.2.6.5 and 6.2.6.5 of the International Standards for Laboratories), contact the laboratory to follow up on the pending results.
- If the sample missing in the LRR is a sample that was not analyzed by the laboratory upon agreement with the ADO, contact the laboratory and ask them to submit the result as "not analyzed" in ADAMS.
- If all the information from the SCR is correct, contact the laboratory to ask them to verify the TA on the original copy of the DCF and to modify the TA in the laboratory result in ADAMS accordingly (if applicable).

#### 4.3 Reject the match between a DCF and a laboratory result.

Once a DCF is matched to a laboratory result, certain fields in the laboratory result will be locked from modification by the laboratory unless the match is rejected by the TA and/or Results Management Authority (RMA). The process to reject a match is as follows:

- Search for the sample code in ADAMS and open the DCF page;
- Find and click the yellow button of laboratory result (i.e. Negative Result, AAF or ATF) at the bottom of the DCF;

Samples (1)	Notification Details	Comments	Participants	Activities(1)	Non-Conformities
Type Urine	Sample Code*	Time of Collection* 19:46	Sent to Lab* LAB-Cologne-GER - Köl	Partial sample <input type="checkbox"/>	CoC
Volume (ml) 140	pH	Specific Gravity* 1.032			
A	Negative Result			View lab result	Valid

- Click on No-Reject Match on the Result Verification page.

Result Verification				
Athlete	ADAMS ID#	Date of birth	Sport Nationality	Gender Male
Sport / Discipline Weightlifting   Weightlifting				
Negative				
Sample Code				✓
Urine	Sample Type		Urine	✓
	Sample Collection Date			✓
IWF - International Weightlifting	Result Management Authority		IWF - International Weightlifting	✓
	Sample Collection Authority			✓
WADA-AMA - World Anti-Doping	Testing Authority		WADA-AMA - World Anti-Doping	✓
Weightlifting   Weightlifting	Sport		Weightlifting   Weightlifting	✓
Out of Competition	Test Type		Out of Competition	✓
	Country			✗
	City			✗
LAB-Cologne-GER - Köln, GERM	Lab		LAB-Cologne-GER - Laboratory	✓
<input type="button" value="No - Reject Match"/> <input type="button" value="Cancel"/> <input type="checkbox"/> complete check				

## 5. Monitor DCF entry in ADAMS

### 5.1 Criteria to match a DCF and a laboratory result in ADAMS

In ADAMS, for a laboratory result (created by the laboratory) to be matched to its corresponding sample's DCF (created by the ADO), the information in the following three fields must be identical:

- Sample code
- Sample type
- Sport

Only after the laboratory result and the DCF are matched will the TA be able to see the laboratory result on the DCF page in ADAMS, as well as in the "Analysis Results" column in the SCR.

## 5.2 Identify missing DCFs

After eliminating the data entry mistakes by following the instructions in Section 4 of this Guide, generate a new LRR in ADAMS to create an updated Excel spreadsheet (follow instructions of Section 2 of this Guide).

In this updated LRR, check the column "Testing Authority from DCF". No data in this column means that the laboratory result has not been matched to a DCF in ADAMS and therefore the DCF for this sample is considered "missing".

A	B	C	D	E	F	G
Sam	Sam	Sport	Discipline	Collection Date	Testing Authority	Testing Authority from DCF
****	Urine	Sport-1	Discipline-1	1/1/2017	ADO-1	ADO-1
****	Urine	Sport-2	Discipline-2	1/2/2017	ADO-1	ADO-1
****	Urine	Sport-3	Discipline-3	1/3/2017	ADO-1	

Check if DCF is entered.

## 5.3 Identify laboratory results not matched to existing DCFs

There is a possibility that the DCF has been entered in ADAMS but is not matched to the corresponding laboratory result due to conflicting information in the three matching criteria. Under such circumstance, the sample code is included in the SCR (based on DCF) but shows no value in the "Testing Authority from DCF" column in LRR because of the no-match.

It is also possible that the DCF is entered in ADAMS and that the information in the three matching fields are also identical to the laboratory result, however there is still no value displayed in the "Testing Authority from DCF" column of the LRR. This may be due to data entry mistakes preventing the match between the laboratory result and the corresponding DCF.

The following table shortlists have some common mistakes that can prevent the match between an existing DCF and laboratory result for the same sample code in ADAMS. It is important to carefully check the data for each sample code in question to identify the reason of no-match and take the corrective action accordingly.

Sample Code from ADAMS DCF (found on SCR)	Sample Code from Lab Result (found on LR R)	Reason for No-match	Corrective Actions
01234	1234	"0" is considered a number at the beginning of the <i>sample code</i> field.	Remove the "0" at the beginning of the <i>sample code</i> field.
1230	1230	Letter "O" typed by mistake instead of number "0" in the <i>sample code</i> field.	Correct letter "O" to number "0" in the <i>sample code</i> field.
" 1234_ "	"1234_ "	A space is considered a number at the beginning or end of the <i>sample code</i> field.	Remove unnecessary spaces in the <i>sample code</i> field.
1235 12388	1238	Any other mistakes in the <i>sample code</i> field can prevent the match. Mistakes are often due to misinterpretation of hand-writing on the original copy DCF or simply typos when the ADAMS DCF was created; as the lab has access to the sample bottle with official sample code, their sample code is usually correct.	Review the original copy DCF to confirm the sample code number matches the lab's and correct the <i>sample code</i> field accordingly.
Boxing Bowls Para-Athletics Sitting Volleyball Table Tennis Etc.	Kickboxing Bowling Athletics Volleyball Tennis Etc.	Different sport codes.	Review the original copy DCF to confirm the sport of the athlete tested: - If the <i>sport</i> field of the ADAMS DCF shows the wrong sport, simply amend it accordingly. - If the lab result shows the wrong sport, contact the lab to ask that they amend the result accordingly.
Blood passport*	Blood	Different sample type.	Review the original copy DCF to confirm the sample type: - If <i>sample type</i> field in the ADAMS DCF shows the wrong sample type, simply amend it accordingly. - If the lab result shows the wrong sample type, contact the lab to ask that they amend the result accordingly.
Partial sample box is checked	-	ADAMS does not match a lab result to a partial sample.	Uncheck the partial sample box in the ADAMS DCF and save.
DCF status is "Cancelled"	-	ADAMS does not match a lab result to a cancelled DCF.	- Use the "Correct" button** on top of DCF page to delete the DCF; - Enter a reason for deleting and save; - Create a new DCF with the same sample code.
DCF status is "Created-In Process"	-	ADAMS does not match a lab result to a DCF that is not complete yet.	- Use the "edit" button on top of DCF page to complete all mandatory fields in the DCF; - Change the DCF status to "Complete-Sample(s) collected and click on "Save";

\*Blood and blood passport are two different sample types in ADAMS. If a whole blood sample is analyzed for both ABP and another prohibited substance(s), the sample code needs to be entered twice as "blood" and "blood passport" respectively on the DCF page in ADAMS.

\*\*If the "Correct" button does not appear on top of your screen, contact the ADAMS Administrator of your ADO to add this role to your ADAMS user account.

## 6. Standard process of calculating TDSSA level of analysis

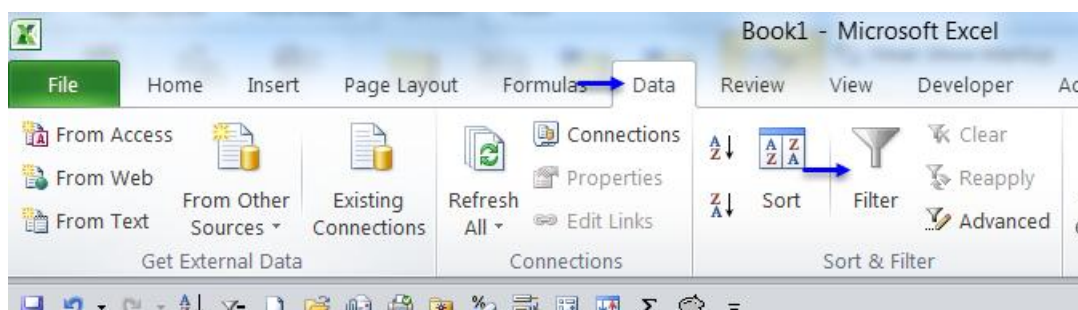
When all the DCFs have been entered into ADAMS and all the data entry mistakes have been eliminated by following the instructions in Section 5 of this Guide, generate a new SCR in ADAMS to create an updated Excel spreadsheet (follow instructions in Section 3 of this Guide) to monitor compliance with the TDSSA.

[Annex 1 to this Guide](#) contains all sport-discipline combinations in the TDSSA Appendices 1 and 2. It also includes the important parameters to be extracted from the SCR in order to calculate your TDSSA level of analyses. Sports and disciplines that are not covered by the TDSSA are not included in Annex 1 (e.g. triathlon/ironman).

It is suggested to follow the alphabetic order of the sport-discipline combinations in Annex 1 that are part of your testing program to determine the corresponding figures from the SCR.

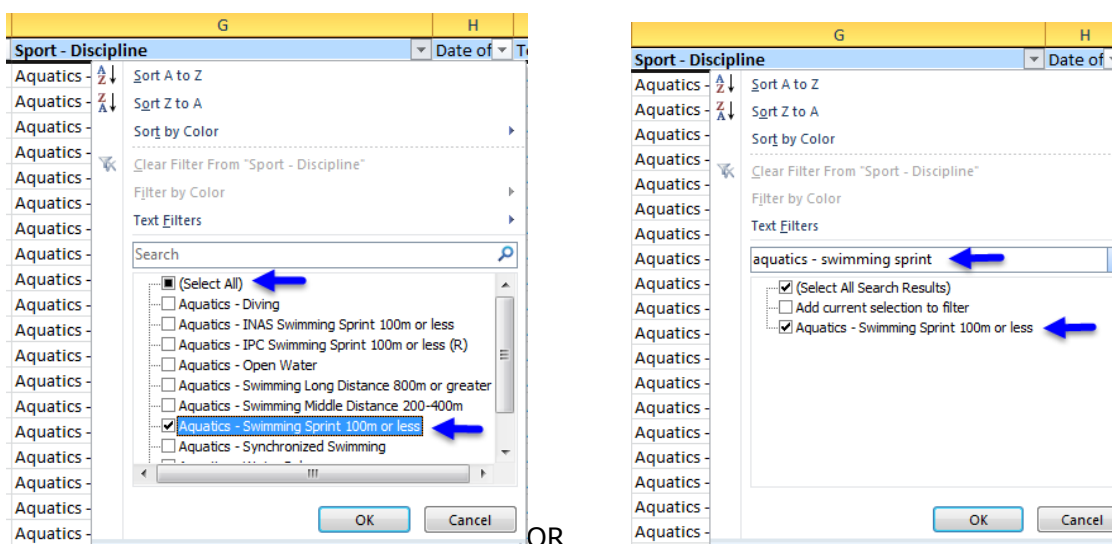
Here are the steps to extract the required information from the SCR.

- 6.1 Click **Data** and **Filter** to apply the filter to the first row of headings in the SCR;



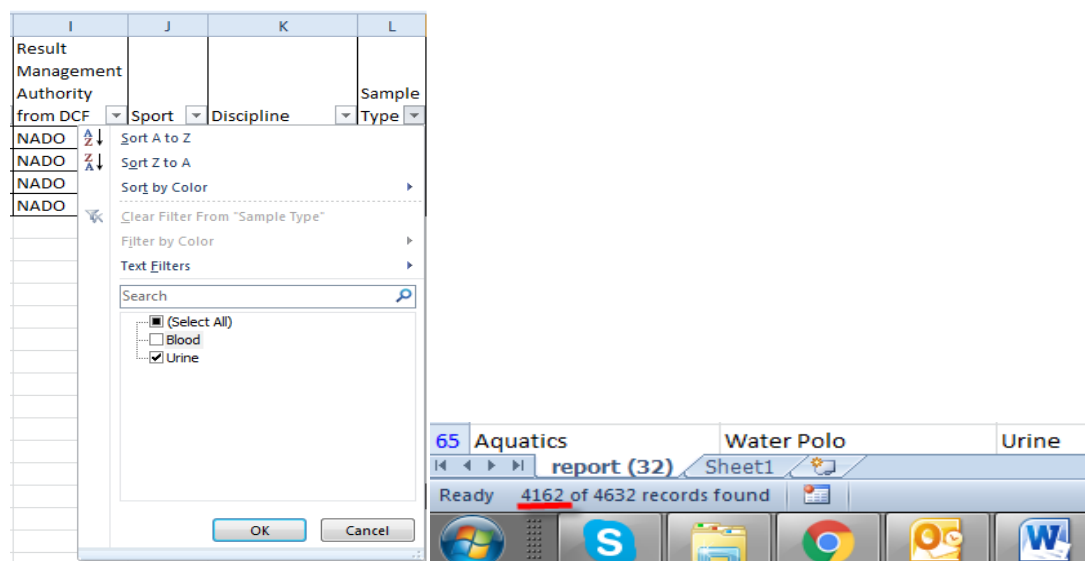
- 6.2 Remove the samples that have no value or labelled as not analyzed in the Analysis Results column.
- 6.3 Remove the samples collected from athletes who are not at the international and national levels by sorting the data in the Athlete Level column.
- 6.4 Remove additional dilute urine samples that are collected from the same athlete in a single collection session. (The objective is to keep only one urine sample code per athlete per collection session in the report to count as one test.) You may need to refer to your own log of dilute samples to identify the additional dilute samples to be deleted. Alternatively, sort the data by athlete full name, date of test and sample type in the SCR.
- 6.5 Select the first sport-discipline combination for which you want to determine the number of tests and level of analyses:
- Go to the Sport - Discipline column heading and click on the filter arrow;
  - Unselect "Select all";
  - Select only the desired sport-discipline combination; Or type the sport in the Search box to find your choice and click OK. This helps to locate your choice when there is a long list of sport-discipline combinations.

The report is now showing all samples that are analyzed for the selected sport-discipline combination (excluding additional dilute samples).



6.6 Determine the total number of tests for the selected sport-discipline combination:

- Go to the *Sample Type* column heading and click on the filter arrow;
- Unselect "Select all";
- Select **Urine** as the sample type;
- The number of selected items is shown at the left bottom corner of the spreadsheet. Record this number in column D of the Annex 1 - **Total urine no dilute** for the selected sport-discipline combination.



- If a blood only collection session\* was conducted, the number of these blood samples should be recorded in column E of the Annex 1 - **Samples in blood only collection sessions\*\***.

\* A blood only collection session is considered a separate test and should be added to the urine samples in determining the total number of tests.

\*\* When an athlete provides both urine and blood samples during one sample collection session, this should be considered 1 test for statistical purposes.



Examples:

Suppose an ADO collected 115 samples from a sport-discipline combination in a given period (i.e. 100 urine and 15 blood); among the 115 samples, 3 are additional dilute urine samples.

Scenario 1:

If all the blood samples were collected along with urine samples, the total number of tests would be 97, which is calculated as follows:

Total samples	115
<b>Less</b> additional dilute urine samples	3
<b>Less</b> all blood samples	15
<b>Plus</b> blood samples collected in Blood Only collection sessions	0
<b>Total tests:</b>	<b>97</b>

Alternatively, 100 urine samples minus 3 dilute urine samples for a total of 97 tests.

Scenario 2:

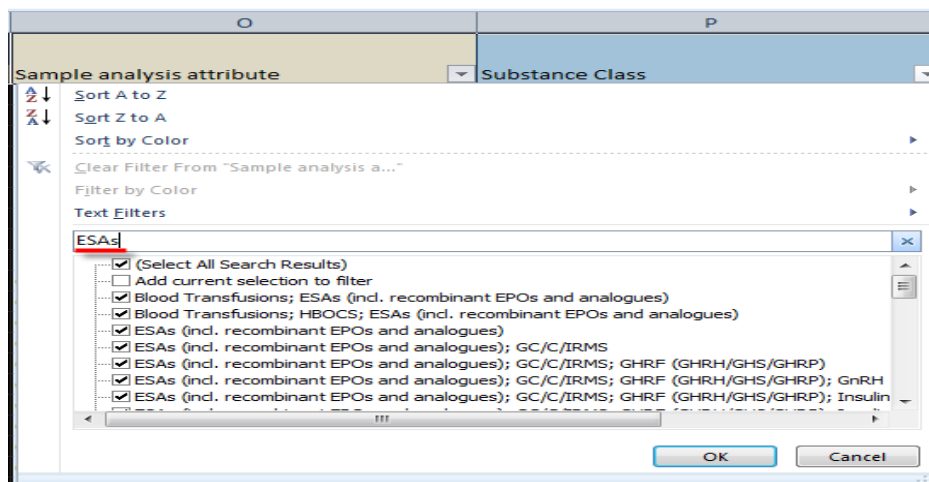
If 5 of the 15 blood samples were collected separately from the urine samples, the total number of tests would be 102, calculated as follows:

Total samples	115
<b>Less</b> additional dilute urine samples	3
<b>Less</b> all blood samples	15
<b>Plus</b> blood samples collected in Blood Only collection sessions	5
<b>Total tests:</b>	<b>102</b>

Alternatively, 100 urine samples minus 3 dilute urine samples plus 5 blood samples collected in Blood Only collection sessions for a total of 102 tests.

6.7 Determine the number of ESAs analyses conducted for the selected sport-discipline combination:

- Go to the *Lab Analysis Type* column heading and click on the filter arrow;
- Type **ESAs** as the keyword in the search bar and click **OK** to select all ESAs analyses;
- Record the number of selected items as shown at the left bottom corner of the spreadsheet in column I of the Annex **1 - ESAs analyses conducted**.



6.8 Determine the number of GH analyses conducted for the selected sport-discipline combination:

- Go to the *Sample Type* column heading and click on the filter arrow;
- Unselect "Select all";
- Select **Blood** as the *Sample Type*;
- Go to the *Lab Analysis Type* column heading and click on the filter arrow;
- Type **GH** as the keyword in the search bar and click **OK** to select all GH analyses;
- Record the number of selected items as shown at the left bottom corner of the spreadsheet in column M of the Annex 1 – **GH analyses conducted**.

6.9 Determine the number of GHRFs analyses conducted for the selected sport-discipline combination:

- Go to the *Sample Type* column heading and click on the filter arrow;
- Unselect "Select all";
- Select **Urine** as the *Sample Type*;
- Go to the *Lab Analysis Type* column heading and click on the filter arrow;
- Type **GHRF** as the keyword in the search bar and click **OK** to select all GHRFs' analyses;
- Record the number of selected items as shown at the left bottom corner of the spreadsheet in column Q of the Annex 1 – **GHRFs' analyses conducted**.

6.10 Repeat the steps 6.5 to 6.9 to calculate the number of tests and specific analyses for each of the sport-discipline combinations in your testing program. The following screenshot shows an example of the calculation results in Annex 1.

Note: In column J, N and R  
 Green: Number of specific analyses above or equal to TDSSA requirement  
 Yellow: 1 specific analysis less than TDSSA requirement  
 Red: Over 2 specific analyses less than TDSSA requirement

SPORT	DISCIPLINE	Sport - Discipline	Total urine no dilute (D)	Samples in blood only collection sessions (E)	Total tests (F=D+E)	ESAs % in TDSSA (G)	ESAs analyses required by TDSSA (H=F*G)	ESAs analyses conducted (I)	ESAs analyses difference (J=I-H)	GH% in TDSSA (K)	GH analyses required by TDSSA (L=F*K)	GH analyses conducted (M)	GH analyses difference (N=M-L)	GHRFs % in TDSSA (O)	GHRFs analyses required by TDSSA (P=F*O)	GHRFs analyses conducted (Q)	GHRFs analyses difference (R=Q-P)
Aikido	Aikido	Aikido - Aikido	15	2	17	5%	0.9	2	-1	5%	0.9	0	1	5%	0.9	5	-4
Air Sports	All	Air Sports - All	10	0	10	0%	0.0	0	0	0%	0.0	0	0	0%	0.0	0	0
American Football	American Football	American Football - Am	20	5	25	5%	1.3	2	-1	10%	2.5	3	-1	10%	2.5	10	-8
Aquatics	Diving	Aquatics - Diving	8	0	8	0%	0.0	0	0	5%	0.4	2	-2	5%	0.4	4	-4
Aquatics	Swimming Sprint 100m or less	Aquatics - Swimming Sp	34	0	34	10%	3.4	2	1	10%	3.4	2	1	10%	3.4	10	-7
Aquatics	Swimming Long Distance 800m or greater	Aquatics - Swimming Lo	80	0	80	30%	24.0	20	4	5%	4.0	2	2	5%	4.0	5	-1
Aquatics	Open Water	Aquatics - Open Water	15	0	15	30%	4.5	3	2	5%	0.8	0	1	5%	0.8	8	-7
Aquatics	Synchronized Swimming	Aquatics - Synchronized	8	0	8	10%	0.8	0	1	5%	0.4	0	0	5%	0.4	1	-1
<b>Total</b>			<b>190</b>	<b>7</b>	<b>197</b>		<b>35</b>	<b>29</b>	<b>6</b>		<b>12.3</b>	<b>9</b>	<b>3</b>		<b>12.3</b>	<b>43</b>	<b>-31</b>

## 7. An automated process of TDSSA monitoring

ADOs that conduct tests in a large number of sport-discipline combinations and are familiar with Microsoft Excel functionality are recommended to use pivot tables and macros to perform the steps from 6.5 to 6.9 to monitor their compliance with the TDSSA.

[Annex 2 to this Guide](#) is a Macro-Enabled Template (.xlsm) with automated calculations for TDSSA monitoring. The steps to use the template are demonstrated in this video:

[https://www.wada-ama.org/sites/default/files/video\\_on\\_macro\\_template.mp4](https://www.wada-ama.org/sites/default/files/video_on_macro_template.mp4)

The steps are as follows:

7.1 Generate and save a SCR in ADAMS and remove:

- samples that are not analyzed or still have lab results pending (section 6.2)

- b) samples from athletes that are not at the international/national levels (section 6.3) and;
- c) additional dilute samples that are collected from the same athletes in a single collection session (section 6.4).

7.2 Open Annex 2, the macro template

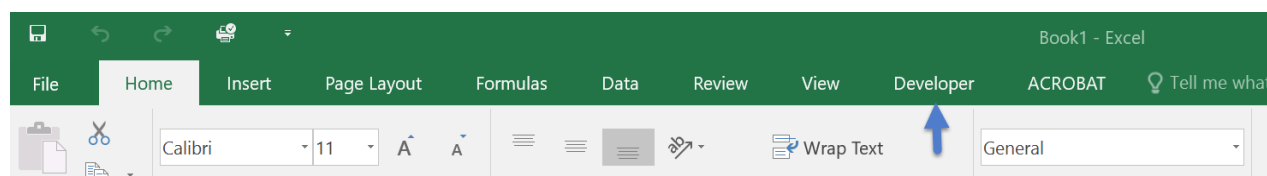
7.3 Copy the data in the SCR (edited as in section 7.1) and paste it to the first tab "SCR" of Annex 2;

- a) Make sure to copy the SCR data starting in cell A1;
- b) Make sure that the data finishes in column "X" - Lab Analysis Type (the SCR report template in ADAMS is already formatted as such)

	A	B	C	D	E	F	G	H	I	T	U	V	W	X
1	Athlete (Last name, first)	ADAMS ID	Athlete Lev	Sample Co	Sample	Sport	Discipline	Sport - D	Date of tes	Lab	Analysis Re	Substance C	Substances	Lab Analysis Type

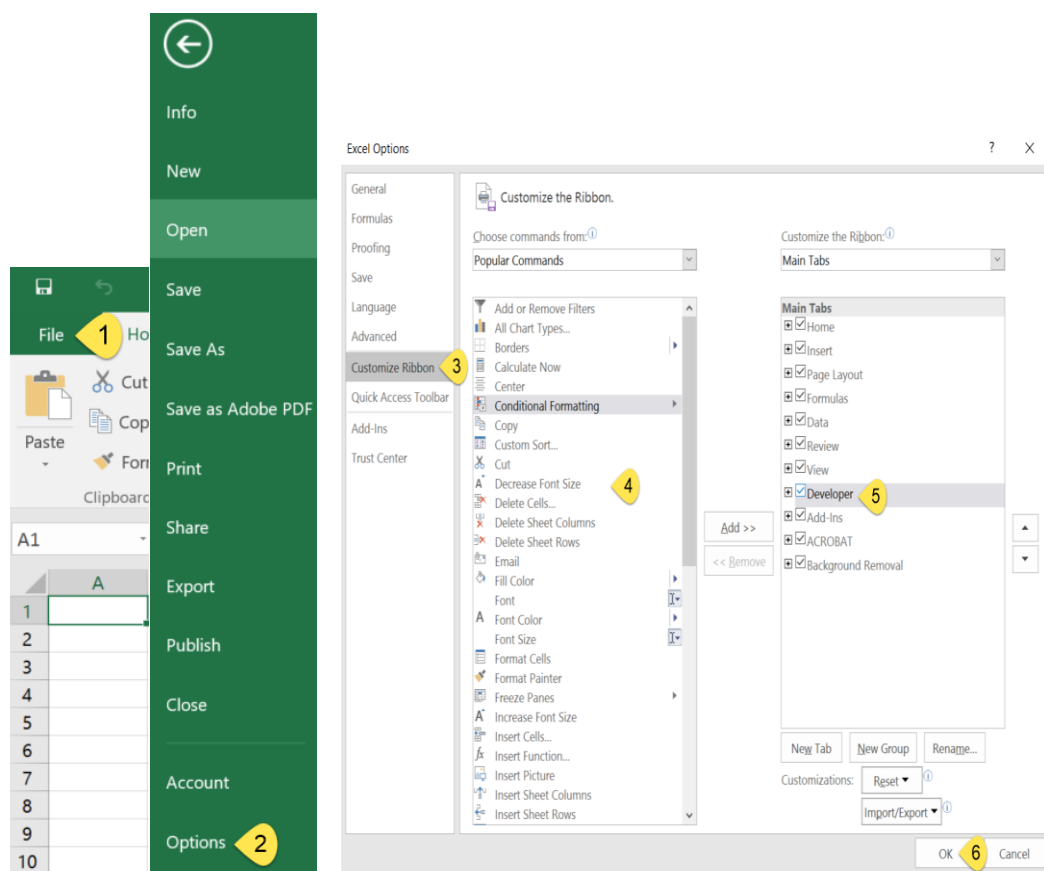
7.4 Run the macros to format the SCR data table and create the pivot tables:

- a) Go to the Developer tab in the menu.

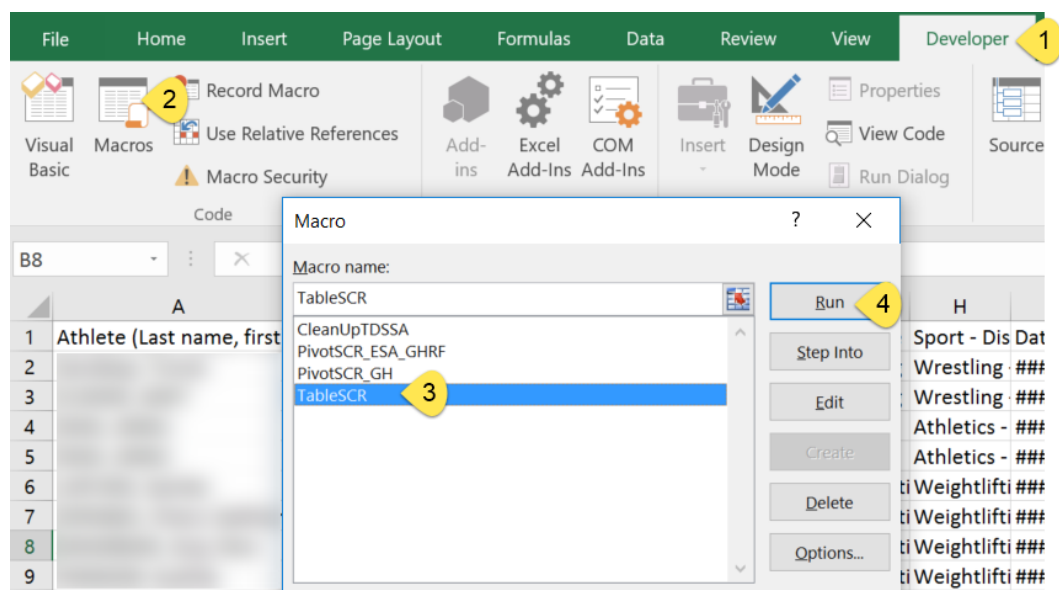


If you don't see the Developer tab, go to:

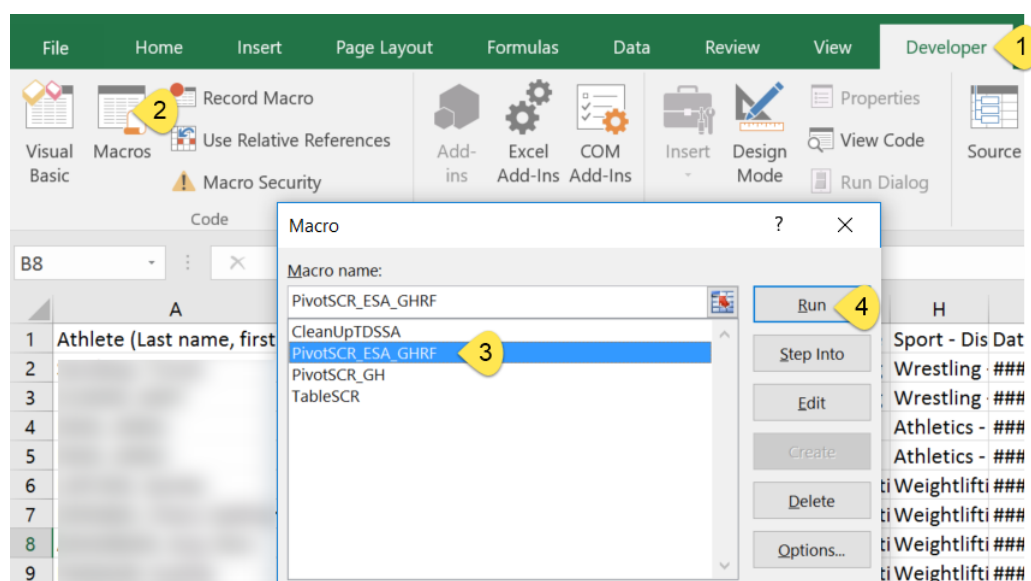
- File
- Options
- Customize Ribbon
- Find "Developer" in the list on the left
- Click "Add" to see the "Developer" in the Customize Ribbon
- Click "OK"



b) Open "Macros" and run the TableSCR macro to format the SCR data.



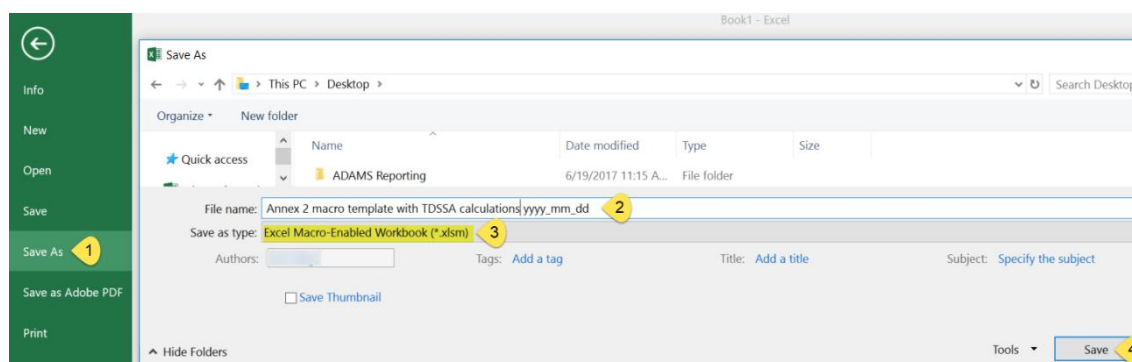
- c) Open “Macros” and run the PivotSCR\_ESA\_GHRF macro to create the pivot tables for ESAs and GHRFs.



- d) Open “Macros” and run the PivotSCR\_GH macro to create the pivot table for GH following similar procedure as ESA and GHRF macro in the previous step.

By now the TDSSA ALL table (5<sup>th</sup> Tab) will have been automatically filled with figures based on the Pivot tables.

- 7.5 Save the file as macro-enabled workbook (.xlsm) file to keep access to all the macros.



**Important:** Annex 2 is subject to regular updates to stay in line with the latest listing of sports and disciplines in ADAMS. **ADOs should always download the latest version of Annex 2 from the WADA website to monitor their compliance with the TDSSA.**

## 8. Conclusion

For further questions and inquiries regarding this Guide, please contact **WADA's Compliance Team** at [compliance@wada-ama.org](mailto:compliance@wada-ama.org).

For further questions and inquiries regarding ADAMS account and reports, please contact the **ADAMS Support Team** at [adams@wada-ama.org](mailto:adams@wada-ama.org).