

Guidelines for race directors seeking IAAF/AIMS measurement of courses in Switzerland

This overview is based on the official guidelines published by IAAF/AIMS. Amendments were done by Roger Kaufmann.

For the attention of the Race Director:

Before seeking a measurement you should have a confirmed route for your course (negotiated with the police and civil authorities as necessary) which you believe to be approximately the correct length. It is best to scale the race distance from large-scale maps, if available. Measurement by a car odometer will most likely be short by 5% or more.

You should consider what section of each road will be open for use by the runners on the day of the race. If it is not the entire road width then you must clearly state any restrictions. Include the exact route to be taken at turns. If this cannot be described as "the shortest possible route" you should indicate the precautions that will be taken to prevent corner-cutting.

Even with your attention to these details the measurer may need to adjust your course to obtain the correct distance. To allow for this you should consider in advance where extra distance may be added (or subtracted): at the start, finish, or at any other point along the course.

Please note that the criteria for *world records* include elevation change and separation. These criteria are included to ensure that a course is not excessively downhill or designed in such a way that a tail wind may unduly affect times. Elevation change is measured in terms of the altitude difference between the start and finish. A course must not drop more than 1m/km for it to be eligible for world records. Separation is the distance in a straight line between the start and the finish and is expressed as percentage of the total distance. To be legal for world record purposes, a course must have a separation of not greater than 50 per cent. If one of the two rules (elevation change and/or separation) is not fulfilled, the performances will be registered but cannot be approved as records.

The IAAF also has strict measurement criteria for courses that can be used for qualifying performances for *World Championships* and *Olympic Games*. The elevation change must be less than 1m/km. (Courses with a separation greater than 50 per cent are eligible for qualification purposes.)

To arrange for your course measurement (after settling the above points), you can either contact directly the measurer of your choice or the International Measurement Administrator of your area (see http://aimsworldrunning.org/AIMS_IAAF_course_meurers.htm), where Switzerland is part of the French- and Spanish-speaking region. As of 2012, there is one single international measurer in Switzerland (Roger Kaufmann, mail@rogerkaufmann.ch). The measurers are listed as „A“ or „B“. „A“ measurers are required for Olympic or World Championship measurements but all those listed will be competent to measure your course.

You should fix a date with the measurer and undertake to provide travel, accommodation and subsistence costs, and an allowance for the time spent on the measurement, the travelling and the compilation of the report, as listed in the Appendix.

- **see checklist below, item 1**

Courses are measured using a "Jones counter" mounted on the front wheel of a bicycle. For international measurements it is often impossible for measurers to bring their own bicycles –

and you will have to provide one. It is best to use a standard road bike (not a racing bike or a mountain bike) with a typical tyre size of 28-630 or 32-622 [*note*: the first figure refers to the width of the tyre (in mm), the second to the diameter of the wheel]. You may also need to provide other items, such as spray paint and a hammer to use for making road markings, as these may be prohibited on aircraft.

- **see checklist below, item 2**

Several copies of a detailed map of the course are also essential, along with directions concerning the road width available on race day and a specification of the exact path to be followed at road junctions if this cannot be described as the "shortest possible route" (SPR).

- **see checklist below, item 3**

The measurer will ride the bike along the SPR to obtain a measurement. This will involve taking a direct line from one corner to the next – often cutting diagonally across the road to do so. To allow such a route to be ridden safely you must take precautions. The best precaution is to secure the assistance of a police motorcyclist, who can direct traffic out of the measurer's line. You should also consider the best time of the day or night at which the measurement can be made, so that there is less traffic on the road. If no police protection can be provided then you should arrange for a vehicle to drive with the measurers, "shielding" them from other traffic. A vital precaution is to allow plenty of time for the measurement, so that the ride is not rushed and risks are not taken.

- **see checklist below, item 4**

Before the measurement ride can be started the bicycle must be „calibrated“. This entails repeatedly riding the bicycle over a straight, flat section of road around 400-500m in length. The measurer will measure this distance with a steel tape after arrival, but you should be able to suggest a suitable location. It should be close to the start/finish (or lay out separate calibration courses near to both if it is a point-to-point course).

- **see checklist below, item 5**

In order to be officially accepted by IAAF/AIMS, the course needs to be ridden and measured twice – either twice by one and the same international measurer, or once by the international and once by another (national) measurer who does not need to be acknowledged by IAAF/AIMS. For practical reasons, the second alternative is typically the preferred one, as the two measurers can ride the course in parallel. If the course has already been measured by a national measurer at an earlier stage and if it remained unchanged since then, one single additional measurement by the international measurer is sufficient.

Based upon his/her calculations, the measurer will certify that the course is not less than the advertised distance "from start to finish". If you wish to have exact splits (kilometers, miles) or any other points marked which may require an additional ride over the course then the costs for this extra ride must be agreed upon beforehand. Please note that the measurement of side-events (e.g. half-marathon course of a marathon event) is labor-intensive and causes additional costs.

After the measurement the measurer will send one copy of his/her report to the appropriate International Measurement Administrator. For courses in Switzerland, the reports will be written in English (situation as of 2012). The measurer will send one further copy of the report to you, the race director, and for courses in Switzerland he will also send a copy to *swiss athletics*. The Administrator will check the details of the report and, if satisfied, will issue an IAAF/AIMS International Measurement Certificate. Copies of this Certificate are to be sent by the Administrator to:

- the race director of the event
- the measurer
- the IAAF
- the AIMS Technical Director

For courses in Switzerland, the measurer makes sure that *swiss athletics* also gets a copy.

The certification remains valid for five years, or until any change is made to the course.

Checklist:

- 1. Confirm all travel, accommodation and payment details with the measurer.**
- 2. Provide all necessary equipment requested by the measurer (e.g. bicycle, hammer, nails, paint, etc)**
- 3. Provide, in advance, maps of the course and details of the road width available to runners and the exact route to be taken at turns.**
- 4. Ensure the safety of the measurement ride by arranging for a police or other escort.**
- 5. Suggest suitable locations for laying out calibration courses.**

Appendix: Costs

The measurers charge the following costs to the race organizer:

- Travel expenses – car
- Travel expenses – air fare/trains/busses^(a)
- Subsistence – breakfast^(b)/lunch^(c)/dinner^(d)
- Accommodation^(e)
- Allowance^(f)

^(a) if travelling by car is not possible/not reasonable

^(b) if measurement starts in the morning

^(c) if measurement ends after/begins before lunch time

^(d) if measurement (including return journey) lasts until 6 p.m. or later

^(e) if arriving the day before or returning the day after the measurement

^(f) This holds for the actual measurement (including journeys) as well as for compiling the report. Reference time: ½ day to 1 day for the measurement, 2 to 4 days for compiling the report.

Please note: The more sophisticated the preparatory work of the race organizers, the lower the measurers' workload – in particular for compiling the report. Additional work entails additional costs, covered by ^(f).