

# **SPECIAL RULES FOR SKI ORIENTEERING WORLD RANKING EVENTS**

Valid from Nov. 2013

## **POINT CALCULATION SUMMARY:**

- A World Ranking Event (WRE) normally consists of one race. In the case of chasing start the competition can be made up of two races, a prologue followed by a chasing start. It is the final result after the chasing start that accounts for WRE points.
- A competitor's points in each competition are calculated based on his/her performance in the race and "the strength of the field" of the competition. In "European SkiO Tour, SOT", IOF Regional Championships events and World Cup competitions all points are raised by 3 %. In World Championship events all points are raised by 5%.
- Before January 1<sup>st</sup> the overall points are calculated as the average of 3 best points, where the last season's final points are used as one competition.
- After January 1<sup>st</sup> until the end of the season the overall points are calculated as the average of the 5 best points, and last season's final points are still used as one competition.
- The final overall points of the season are calculated as the average of a competitor's 5 best points, and the last season's final points are no longer included.
- If a competitor has competed in fewer than 5 competitions, averages are reduced by 4% for each missing competition.

## **COMPETITION ALLOCATION (see also Item 1 in "POINT CALCULATION DETAILS"):**

All IOF member Federations: four competitions per season

- o A maximum of 2 competitions per federation is allowed for each of the following time periods:
  - Period 1: November – December
  - Period 2: January – February
  - Period 3: March – April

All IOF World Championship, World Cup, and Regional Championship events are WREs outside the hosting federation's allocation. The same applies for other approved international championships such as CISM World Winter Games, FISU Winter Universiade and FISU World University Ski Orienteering Championships.

**Postponing a competition:** If a WRE is postponed to a later date in the same season, the WRE status will remain without need for a new application.

**Cancellation of a competition:** In the case of total cancellation due to the lack of snow, too cold weather or similar, a Federation should first look into the possibility of applying for the WRE status to be moved to another future competition (regardless of time periods). Note that WRE status cannot be applied for a competition retrospectively, i.e. after the competition has been held, however. If it proves impossible to move the WRE status to another competition, the WRE service fee may be waived.

If there is a high probability that a competition will need to be cancelled, the organiser should inform the IOF Office (riikka.tolkki@orienteering.org) well in advance. The final decision to move or cancel a competition must be communicated to the IOF Secretariat without delay.

If a World Cup competition is cancelled, its WRE status cannot be transferred to another competition.

## **POINT CALCULATION DETAILS:**

### **1 Which competitions are World Ranking Events?**

1.1 World Ranking Events are chosen by the Federations, each of which is allocated a certain number of competitions by the Ski Orienteering Commission. WREs must follow the criteria below:

- they shall be Open events
- mass start events with the same course from start to finish cannot count
- relay races for teams cannot count
- multi-day events: only individual races shall be chosen for Ranking Events, chasing start with loops are also approved. Overall times or overall points cannot be used.
- in order to facilitate point calculations, **official** competition results must be sent to the IOF Ranking List host on the day of the event..
- changes of competitions dates and possible cancellations should be informed immediately to the IOF World Ranking host and IOF Office.

Any deviations from these criteria must be approved by the IOF Ski Orienteering Commission (via the IOF Office).

1.2 World Championship, World Cup, Regional Championship, and other approved international championships individual (Sprint, Middle, Long and Ultra Long) races count towards the World Ranking lists.

### **2 The formulas used in Ski Orienteering World Ranking**

2.1 The formula to be used for ranking takes into account

- a) strength of field at each event,
- b) status of the competition, and
- c) differing spreads of times at different events is given by:

$$RP = (MP + SP \times (MT - RT)/ST) \times IP$$

where the number of **ranked skiers** (see 2.3 below) is 20 or more.

- 2.2 There must be at least 4 **ranked skiers** in order for a race to qualify for the World Ranking scheme.
- 2.3 A **ranked skier** is defined as one whose average World Ranking race points score from all the **current and previous season's** races is greater than or equal to 600 and who finishes within the winner's time plus 50%.
- 2.4 Calculate for each **ranked skier** the average of all his/her unweighted (i.e. for  $IP = 1.00$ ) points scores from the **current and previous season**. Then calculate the mean  $MP$  and the standard deviation  $SP$  of these averages.
- 2.5 Calculate the mean  $MT$  and the standard deviation  $ST$  of the times of all **ranked skiers**.
- 2.6 Using  $RT$ , each skier's race time, finally calculate  $RP$ , the race points for each competitor at the event.
- 2.7 If the number of **ranked skiers**  $n$  is small ( $n < 10$ ),  $SP$  can't be evaluated reliably enough and the formula in 2.1 must be replaced by the following:

$$RP = (2600 - RT \times (2600 - MP)/MT) \times IP$$

- 2.8 If the number of **ranked skiers** is such that  $10 < n < 20$  each skier's points is given by a weighted average of the large events points ( $RP_L$ , as calculated by 2.1) and the small events points ( $RP_S$ , as calculated by 2.7) as follows:

$$RP = RP_L \times (n - 10)/10 + RP_S \times (20 - n)/10$$

- 2.9 If  $RP$  is negative, these points are ignored and they won't be included in any calculation of overall score,  $MP/SP$ /ranked skier status or re-basing in the end of the year.
- 2.10  $IP$  is a factor which depends on the status of the event. It would normally equal 1.00. For WOC Sprint, Middle and Long Final races,  $IP$  is raised to 1.05. For individual World Cup (final) event,  $IP$  is raised to 1.03.

**2.11a BEFORE 1st January the overall score of each skier will be the highest of the following:**

- The average of 3 best points that season
- The average of 2 best points that season reduced by 4%
- The best points that season reduced by 8%

**2.11b AFTER 1<sup>st</sup> January the overall score of each skier will be the highest of the following:**

- The average of 5 best points that season
- The average of 4 best points that season reduced by 4%

- The average of 3 best points that season reduced by 8%
- The average of 2 best points that season reduced by 12%
- The best points that season reduced by 16%

2.12 During a season, the previous season's final overall points are counted for each skier as one 'base' competition. These base points will be removed after the season's last WR race. These base points are not included in the calculation of *MP/SP*/ranked skier status or re-basing at the end of the year.

2.13 There should be separate lists for men and women based on performances in Open, or M/W21E races only.

2.14 At the end of the season, both groups of skiers (i.e. both men and women) shall have all *RPs* re-based so that their average points have an overall mean of 1000 and standard deviation of 200. Re-basing is made using the formula

$$\text{re-based } RP = (RP - MRP) / SRP * 200 + 1000, \text{ where } MRP \text{ is the mean and } SRP \text{ is the standard deviation of all race points.}$$

(No negative *RPs* are included in re-basing)

2.15 All *RPs* and total score averages are rounded down to the nearest whole number.

2.16 If the race doesn't have enough ranked skiers, but still has at least four skiers within winner's time + 50%, the points will be awarded with *MP* = 700 and *SP* = 100. However maximum points for that kind of competition are 1000.

2.17 Races, where rule 2.16 is applied, are excluded from calculation of *MP/SPs*.

### **3 The task which is fulfilled by the IOF World Ranking hosts for the IOF comprises several sections:**

3.1 Collection of IOF World Ranking Events data from all M/W21E races. It is essential that all results are available electronically and that good contact between each organiser and the IOF World Ranking hosts is developed.

3.2 Immediate publication of World Ranking lists on the Internet.

**World Ranking List is hosted by Ray Barnes / VIProgrammers, email: [wr\\_results@6prog.org](mailto:wr_results@6prog.org)**