## Competition Rule $S$ : The Ranking Scheme

These Rules must be read in conjunction with the British Orienteering Rules of Orienteering. Where these Rules vary or supplement British Orienteering Rules of Orienteering, then these Competition Rules will take precedence.

## 1. General information

### 1.1 Purpose

1.1.1 The aim of the British Orienteering Ranking Scheme is to rank all regular and competent orienteers in order of orienteering ability. The Ranking list may also be used for International selection purposes as well as for seeding competitors at Competitions.

## 2. Eligibility

2.1.1 All Events at levels $A, B$ and $C$ are part of the ranking scheme expect for Relay, score, chasing start and other mass start events.
2.1.2 All British Orienteering members who gain points at ranked events will have their points stored in one ranking list.
2.1.3 All competitors who are members of British Orienteering in the top year of classes M/W16, and in all classes M/W18 or older, at Ranking events will score ranking points.
2.1.4 Membership numbers are used to link results from different events for a given runner.
2.1.5 The total of a runner's best six scores over the past 12 months gives a runner's current ranking. Runners competing in Short classes (and M/W18/16B) are ranked, but are not ranked separately, i.e. points from the W45S course at an Area Championships will be added to the overarching ranking list, appearing within the W45 category (or the normal age class of the competitor if this is different).

## 3. Administration

3.1.1 The ranking list is accessible from the British Orienteering website and may be filtered.
3.1.2 The system is written in such a way that it can accept results data from both age based courses (e.g. Area Championships) and also "ageless" courses, e.g. colour coded courses and Urban series courses and produce valid rankings points.
3.1.3 When a competitor is to be ranked as a member of a new club or under a change of name, British Orienteering must be informed so that the membership records can be updated. This will then update the information in the ranking lists.
3.1.4 The rankings lists are available via the British Orienteering web site at all times.

## 4. Submission of results

4.1.1 Final results must be submitted electronically to the results page in the British Orienteering web site within 7 days of the event. Results not uploaded within this period will be excluded from rankings calculations.
4.1.2 Rankings points will then be calculated and displayed automatically.
4.1.3 Results must be submitted in the British Orienteering file format.
4.1.4 Organisers must include competitor British Orienteering numbers with their results and to submit them as soon as possible after the event.
4.1.5 Other mandatory data is defined within the 'User Guide' available on the British Orienteering web site.

## Competition Rule $S$ : The Ranking Scheme

## 5. Calculation of ranking points

5.1.1 Courses where there are fewer than 10 ranked runners are not included in any rankings calculations.
5.1.2 Points for the rankings lists are calculated as follows:

- Runner's points,
- (MT - RT)/ST gives number of standard deviations of runner's time RT above or below race mean time MT (ST is the standard deviation of the ranked runners' times)
- Multiplying by SP, the standard deviation of the ranked runners' points, converts this to points
- This difference is added to MP, the average points for the runners in the race and this gives the runner's points RP
- Points awarded are given the same weighting whatever the level of event.
- The smallest number of points which can be awarded is zero (any negative scores are replaced by 0 ).
a) Runners who have previously gained points in a class are called 'ranked runners' and their 'current score' is the mean of all their previous scores in the last year (not just the best six). The last year is the 12 month period up to the date of the event being computed; any subsequent scores are ignored. This current score is used as the best predictor of their performance at an event (though it is their best six results that make their published ranking). The ranking scheme operates by using the performance of ranked runners on each course at an event to standardise the scores. This process ensures that points awarded to a runner are (as far as possible) dependent only upon the quality of the run and not who else turns up at the event.
b) The "mean of all their previous scores in the last year (not just the best six)" is calculated from each runner's scores of greater than zero only. Any score of zero is ignored, i.e. it is as if the runner had not competed in the race at all.
c) At ranking events, the mean of the current scores of the ranked runners who complete a course is awarded to a runner matching the mean time of those ranked runners. The standard deviation of the current scores of those ranked runners is also calculated along with the standard deviation of their times. For these four calculations, the final $10 \%$ (rounded up) are ignored e.g. if there are 38 ranked runners on a course, only the first 34 are used for the calculation.
d) The standard deviation score is added or subtracted from the mean score for each standard deviation time faster or slower than the mean time (pro-rata). The current scores of all ranked runners are rebased after each event to ensure that the mean current score of all ranked runners is 1000 and the standard deviation of their current scores is 200. This prevents the scores drifting over time.
e) Example
- Suppose $X$ comes 4 th on a course in a time of 88 minutes (RT); the average time for the ranked runners in the race is 100 minutes (MT) and the standard deviation of their times is 10 minutes (ST)
- Thus $(M T-R T) / S T=12 / 10$, or 1.2 standard deviations above the average time for the ranked runners in the race
- Suppose the quality of the runners is high (mean points (MP) = 1100 and standard deviation $(S P)=100$ )


## Competition Rule S : The Ranking Scheme

- So $X$ gets more points than the average runner, this given by $1.2 \times 100=120$
- Thus final points $=1100+120=1220$


## 6. Uploading rankings results into the British Orienteering website

a) Provided the columns (fields) indicated in 4.2 .1 in bold are filled, a winsplit browser file exported from any results programme (such as OEScore2003 © Stephan Kramer) can be uploaded into the British Orienteering results/ranking system.
b) Winsplit Split Browse data file

- The normal winsplit split browser file contains a header line with column names in:
- Stno;Chip;Database

Id;Surname;Firstname;YB;S;Block;nc;Start;Finish;Time;Classifier;

- Club no.;Cl.name;City;Nat;Cl. no.;Short;Long;Num1;Num2;Num3;Text1;Text2;Text3;
- Adr. name;Street;Line2;Zip;City;Phone;Fax;EMail;Id/Club;Rented;Start fee;Paid;
- Course no.;Course;km;m;Course controls;PI;Start punch;Finish punch;Control1;
- Punch1;Control2;Punch2;Control3;Punch3;Contro14;Punch4;Control5;Pun ch5;Control6;
- Punch6;Control7;Punch7;Control8;Punch8;Control9;Punch9;Control10;Pu nch10;
- (may be more) ...
c) Following this are the rows containing the data for the event, each row is terminated with a carriage return $\{C R\}$.
d) The fields that are required for a local event to be uploaded have asterisks (*) the fields that are bold will be completed for the event results to be loaded into the ranking system.
- Stno
- Chip
- Database $/ d^{*}$
- Surname*

BOF number of member

- First name*

Surname of member

- $Y B$
- $S$

First name of member

- $N c$
- Start
- Finish
- Time* Time taken on course (00:00:00, hrs:mins:secs)
- Classifier* blank, 0-3; blank or 0 is competitive; 1, 2, 3 are not
- Club no.
- Cl.name* Club name - although often stored in City
- City
- Nat
- Cl. no. Age Class competition entered if applicable
- Short
- Long


## Competition Rule S : The Ranking Scheme

- Num1
- Num2
- Num3
- Text1
- Text2
- Text3
- Adr. Name
- Street
- Line2
- Zip
- City
- Phone
- Fax
- Email
- Id/Club
- Rented
- Start fee
- Paid
- Course no.* Course number, a number 1 to ...
- Course* Course Name, usually a colour at local and regional events
- km Length of course in km
- $m \quad$ Climb on course in metres
- Course controls No of controls on course
- PI
e) Each control is then listed for as many controls as there are
f) Do not be concerned if your field names are different to the above, provided you understand the data that each field contains.
g) If you are creating a data file to upload from some other software you need to provide the following data:
- Database ld* $^{*}$ BOF number of member
- Surname* Surname of member
- First name* First name of member
- $S \quad$ Sex, M/F
- Time* Time taken on course (00:00:00, hrs:mins:secs)
- Classifier* blank, 0-3; blank or 0 is competitive; 1,2, 3 are not
- Cl.name* Club name
- Cl. no. Age Class competition entered if applicable
- Course no.* Course number, a number 1 to ...
- Course* Course Name, usually a colour at local and regional events
- km Length of course in km
- $m \quad$ Climb on course in metres
- Course controls No of controls on course

Two user guides and the file specifications are available from the British Orienteering website.

