

5.3 ELITE RANKING SCHEME

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1 Purpose

Purpose of the Elite Ranking Scheme

- To raise the profile of orienteering and of our athletes
- To act as motivation for athletes to compete in high quality elite events
- To provide a fair and objective ranking list of Australian elite and junior elite orienteers
- To support the profile and importance of high events within and outside the orienteering community

The scheme determines an orienteer’s ranking based on their best five results over a rolling 12-month period. Points for each race are allocated based on the orienteer’s performance, the spread of times, and the strength of the field.

2 Scope

- 2.1 Separate Elite Ranking lists are maintained for elite men, elite women, junior elite men, and junior elite women.
- 2.2 Rankings for classes other than those indicated above are calculated by the Statistician, Non-elite Ranking Scheme using a simplified system.
- 2.3 Orienteers must be a member of a Member State/Territory to be eligible for the Australian Orienteering Elite Ranking Scheme, with Nationality = Australia.
- 2.4 Rankings points for elite men and elite women are available in nominated Australian Ranking Events in elite or sport classes (21E). Where elite classes are not offered, ranking points will be available in open classes (21A). Rankings points for junior elite men and junior elite women are available in nominated Australian Ranking Events in junior classes only (20E). Where junior elite classes are not offered, ranking points will be available in 20A, 18A classes or the Senior Boys/Girls class in the Australian Schools Championships. If the junior elite class is eligible for World Ranking points, then juniors can also score senior elite ranking points.
- 2.5 Rankings include points obtained from overseas World Ranking Events. This enables overseas based Australians to obtain a ranking. Considerable effort has been taken to calibrate these WRE points with the points obtained from the Australian Scheme to make the scheme fair.
- 2.6 Ranking points for each ranking class shall be calculated separately. The exception is where World Ranking Events may combine junior elite and senior elite result lists.

3 Scheme Details

3.1 General Points:

- 3.1.1 The formula to be used to calculate ranking points takes into account;
 - strength of field at each event and,
 - differing spreads of times at different events
- 3.1.2 The best 5 results in a 12-month period will give the final score of each ranked orienteer.
- 3.1.3 Ranking list are published for:
 - All events, and
 - Sprint events only
 - Middle/Long events only
- 3.1.4 Points scored from IOF designated World Ranking Events (WRE's) are included in this scheme. Both schemes use the same calculation formulas.

3.2 Ranking Races

Enhancement Factor	Race Type
1.05	National Championship
1.00	State Championship, National League, Australian Schools Orienteering Championships (Senior classes), ANZ Test Match, ANZ Challenge, Nominated National Selection races
Refer to WRE rules	World Ranking Events (including World Championship, World Cup, Regional Championship, JWOC, World Games)

3.3 Definition and Initial Calculations

3.3.1 Definition of Ranked Athletes:

- A ranked athlete is an athlete who is placed in the race and has current Australian Ranking scores, excluding scores of 10.
- An outlier athlete is one whose preliminary calculated unweighted ranking points (RP) are more than 100 different from their average prior unweighted ranking points.

3.3.2 Initial Calculations:

- Calculate the average prior unweighted ranking points of all ranked athletes in the race.
- Determine the mean (MP) and standard deviation (SP) of these average prior unweighted ranking points.
- Calculate the mean (MT) and standard deviation (ST) of the race times (RT) of all ranked athletes.
- Determine the unweighted calculated score for the winner using the appropriate formula.

3.2 Setting Minimum and Maximum Points

The minimum and maximum ranking points for a race and the weighting factor, IP, for the race are set as follows:

- Australian or World Ranking Event: The winner scores a minimum of 800 and a maximum of 1375.
- Higher-Level Event: refer to the IOF World Ranking rules.

If the Winner's unweighted calculated score is between 800 and 1375,
 $IP = 1 \times \text{Enhancement Factor}$

If the Winner's unweighted calculated score is less than 800,
 $IP = 800 / \text{Winner's unweighted calculated score} \times \text{Enhancement Factor}$

If the Winner's unweighted calculated score is greater than 1375,
 $IP = 1375 / \text{Winner's unweighted calculated score} \times \text{Enhancement Factor}$

3.3 Preliminary Calculation of Ranking Points (RP):

- If there are 8 or more ranked athletes, use the formula:
 $RP = (MP + SP \times \{MT - RT\} / \{ST\})$
- If there are fewer than 8 ranked athletes, use the formula:
 $RP = (2000 - RT \times \{2000 - MP\} / \{MT\})$

3.4 Recalculation for Non-Outlier Athletes:

- Calculate the mean (MP) and standard deviation (SP) of the average prior unweighted ranking points of all ranked non-outlier athletes.
- Calculate the mean (MT) and standard deviation (ST) of the race times (RT) of all non-outlier ranked athletes.
- Use the following formulas:
 - For 8 or more non-outlier athletes:
 $RP = (MP + SP \times \{MT - RT\} / \{ST\}) \times IP$
 - For fewer than 8 non-outlier athletes:
 $RP = (2000 - RT \times \{2000 - MP\} / \{MT\}) \times IP$
 - If there are no non-outlier ranked athletes, set MT to the winner's time and use the formula:
 $RP = (2000 - RT \times \{1200\} / \{MT\}) \times IP$

3.5 Knock-Out Sprint Calculation

- Points are calculated differently for Knock-Out Sprint, involving qualification rounds and final overall results.
- Points are assigned based on a per-place increment calculated from the ranking points of runners at the 10th and 90th percentiles.

3.6 Rebasing Points

Before each ranking calculation, the positive unweighted points of each athlete from the last 12 months are re-based so that:

- The average positive unweighted Australian points of World Ranked Australian athletes in the last 12 months is equal to the overall mean of their WRE points from the same

period, and

- the standard deviation of the positive unweighted Australian points of World Ranked Australian athletes in the last 12 months is equal to the overall standard deviation of their WRE points from the same period

4 Management

- 4.1 The Australian Ranking Scheme administrator collates Ranking Event results from Eventor as soon as possible after each ranking event.
- 4.2 The administrator receives the World Ranking Event updates from the World Ranking Scheme and applies the Australian scores to the database.

5 Publication

- 5.1 The Australian Ranking Scheme delivers relevant and timely rankings, available on the internet.
- 5.2 Rankings summaries are published quarterly through Orienteering Australia communications.
- 5.3 At the completion of each orienteering season, a summary of the top rankings will be published in the *Australian Orienteer* at the discretion of the editor.

6 Ratification

- 6.1 This scheme was ratified at the December 1999 OA National Conference for M/W21 orienteers, at the December 2003 OA National Conference for M/W-20 orienteers, with minor modifications approved at the December 2004 OA National conference. Further minor modifications were approved by the OA Board in 2006, 2008, the 2010 OA National Conference and 2024.

7 Further Information

Additional details can be obtained from the Orienteering Australia website, or by contacting Bruce Arthur via the OA General Manager.

8 Review of Policy

- 8.1 This policy shall be reviewed annually by the Board of Orienteering Australia.