

## 1 Overview

BVF wishes to move towards a selection system that includes ranking as a component.

The issues are:

- What events should be used as input?
- How should points be allocated?
- How are ranking tables used for selection?

These questions are contentious so this document proposes a trial system for evaluation.

A set of qualifying events are chosen including BVF events, EVF Championships and Opens. For each participating BVF fencer, points are accumulated.

The best results from a set number of events are added together to form a total.

Ranked lists, the Category Lists, are provided for each of the 24 weapon-age categories in order of their total points.

A ranked list, the Weapon Rank, is provided for each of the 6 weapons with fencers in order of their total points.

### 1.1 Use of the Ranked Lists

The Category Lists will be used for seeding of BVF age categorised competitions eg Age Groups initially at the discretion of the selectors.

The Weapon Lists will be used for seeding of BVF competitions that are not age categorised eg BVF Championships initially at the discretion of the selectors.

The Ranked Lists will be used in selection for GBR representative teams when and if the BVF membership decides it is appropriate.

### 1.2 Nomenclature

An **event** has a name, a location and a date eg BVF Championships, Gloucester, 2016

A **competition** has a weapon, entries and results eg ME, 62 entries, John Mason came 1<sup>st</sup>

## 2 Events

### 2.1 Types of Event

A range of events are included in the ranking system. The points for first place (Max Points) are based on the acknowledged strength of the event.

Event Type	Age Grouped
World Individual Championships	✓
European Individual Championships	✓
BVF Championships	No
Age Group Qualifiers	✓
West Midlands Open, Hampshire Vets	No
Leon Paul Vets Open	No
Nominated Senior Opens	No
Nominated Overseas Veteran Opens	✓

CHOICE of event is important. It means that the Cat1 fencers have competitions to attract them, and the older Cat4 fencers have other competitions where they fence their peers and can avoid injury. The women also need a choice so that they avoid repeatedly fencing the same small group.

Choice is also important for those fencers who claim that they were denied a good result by being knocked out by a youngster or by someone having a bad seeding.

### 2.2 Age of Event

The last 12 months of events could be selected.

The last 24 months of events could be selected with a weighting factor towards the more recent result.

For the trial system a fixed set of representative events will be included. **These events will be shown on the ranked lists.**

## 3 Ranking Points

Points can depend on the following factors:

- The type of event
- The strength of the competition ie the quality of the entries
- The final placing in the competition OR the relative position with respect to other veteran fencers
- The number of fencers in the competition, 3<sup>rd</sup> place out of 10 is not as impressive as 3<sup>rd</sup> place out of 30
- The age of the fencer in a mixed age competition ie a Cat 3 fencer winning the BVF Mens Foil Championships should be recognised as a significant result

The ranking points awarded to a fencer in a competition are calculated by multiplying all these factors together.

Each of the above factors is discussed in the following sections.

### 3.1 Type of the Event

Some events are harder than others and this is recognised by different values for the points awarded for first place (Max Points)

Event Type	Max Points
World Individual Championships	100
European Individual Championships	80
BVF Championships	50
Age Group Qualifiers	50
Nominated Overseas Veteran Opens	50
West Midlands Open, Hampshire Vets	30
Leon Paul Vets Open	30
Nominated Senior Opens	30

### 3.2 Strength of the Competition

The strength could be calculated by an algorithm using the rankings of the fencers entered. No algorithm is currently proposed so the factor for this element is 1.

### 3.3 Final Placing

Placings for competitions are taken straight from the published results. If an event allows foreign or non-BVF entries and the top placed BVF member is third then he/she gets points for 3<sup>rd</sup> place.

### 3.4 Size of Competition

Whatever the size of the competition the first placed gets Max Points. The last placed is awarded 1 point. A sliding scale is then be used for intermediate places.

This ensures that a 3<sup>rd</sup> place in an entry of 30 is better rewarded than a 3<sup>rd</sup> place in an entry of 10.

The bottom place is awarded something (1 point) so that ALL vet fencers appear in the ranking list.

The further one gets down the final ranking the less reliable is the comparison between two fencers. Perhaps a logarithmic scale would be more appropriate (EVF uses one that was amended for Vets fencing).

**The sliding scale will be used for now but introduce a log scale later .**

### 3.5 Mixed Age Competitions

In mixed age competitions an older fencer should get more points than a younger one for achieving the same position in the final ranking.

An Age Factor is used as follows:

Cat 1	45/40
Cat 2	55/40
Cat 3	65/40
Cat 4	75/40

This handicap boosts the points for fencers in the Weapon List only. It is a contentious point and a switch will be provided so that the Weapon List can be built with or without the handicap.

#### 4 Sub-set of Results

There are at least 9 events where points can be awarded. Fencers are not expected to do every competition but they are expected to choose a minimum number to accumulate points.

For the implementation, for simplicity:

The three (3) best results will be taken.

#### 5 Selection

It is proposed that the Ranking System be used for a period of 2 years to ensure that the rankings are accepted by the membership.

Options for the algorithm to select the World Championships squad then include:

- a) 1 fencer selected from the BVF Championships, 1 from the BVF Age Groups, the remainder from the ranking tables
- b) All fencers selected from the ranking tables

In the first case if a fencer selected from the BVF Championships (for example) drops out after selection has been published then the next best placed and available fencer is taken from the same competition.

#### 6 Implementation of a Ranking System

I propose to set up a software program, integrated with the BVF database, to produce ranking lists.

The program will:

- Import results from competitions
- Calculate ranking points based on the sections above
- Show rankings based on the 3 best results in the test data
- Show ranking by weapon (all ages) and ranking within an age group
- Show how the ranking points have been calculated for each fencer

The program will be hosted on the BVF server and will be accessible to the membership.

The data will include the following mix of event types:

- BVF Championships (traditional format)
- BVF Age Group Qualifiers
- WMO
- BVF National Championships (age grouped)
- Summer Selection Event (age grouped)
- European Individual Championships
- World Championships
- Welsh Veterans Open
- Oversees events as recommended by the International Fencing Officer
- BF Opens (to be decided)

John Mason

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