FAI SPORTING CODE
Section 3 – Gliding
Annex D
Rules for the Official IGC Pilot Ranking List

2020 Edition
Effective 1 October 2020

Ver. 1.2, 6 October 2020
All international sporting events organised wholly or partly under the rules of the Fédération Aéronautique Internationale (FAI) Sporting Code are termed FAI International Sporting Events. Under the FAI Statutes, FAI owns and controls all rights relating to FAI International Sporting Events. FAI Members shall, within their national territories, enforce FAI ownership of FAI International Sporting Events and require them to be registered in the FAI Sporting Calendar.

An event organiser who wishes to exploit rights to any commercial activity at such events shall seek prior agreement with FAI. The rights owned by FAI which may, by agreement, be transferred to event organisers include, but are not limited to advertising at or for FAI events, use of the event name or logo for merchandising purposes and use of any sound, image, program and/or data, whether recorded electronically or otherwise or transmitted in real time. This includes specifically all rights to the use of any material, electronic or other, including software, that forms part of any method or system for judging, scoring, performance evaluation or information utilised in any FAI International Sporting Event.

Each FAI Air Sport Commission may negotiate agreements, with FAI Members or other entities authorised by the appropriate FAI Member, for the transfer of all or parts of the rights to any FAI International Sporting Event (except World Air Games events) in the discipline, for which it is responsible or waive the rights. Any such agreement or waiver, after approval by the appropriate Air Sport Commission President, shall be signed by FAI Officers.

Any person or legal entity that accepts responsibility for organising an FAI Sporting Event, whether or not by written agreement, in doing so also accepts the proprietary rights of FAI as stated above. Where no transfer of rights has been agreed in writing, FAI shall retain all rights to the event. Regardless of any agreement or transfer of rights, FAI shall have, free of charge for its own archival and/or promotional use, full access to any sound and/or visual images of any FAI Sporting Event. The FAI also reserves the right to arrange at its own expense for any and all parts of any event to be recorded.
TABLE OF CONTENTS

GENERAL 7
  1.1 Purpose of Annex 7
  1.2 Background 7

2 OBJECTIVES 7

3 SANCTIONED COMPETITIONS 8
  3.1 Category 1 events 8
  3.2 Category 2 events 8
  3.3 Competition Sanction Fee 8

4 RANKING LIST MANAGEMENT AND ADMINISTRATION 8
  4.1 Management 8
  4.2 Inclusion of Competition Results 9
    4.2.1 Submission of results 9
    4.2.2 Pilot details 9
    4.2.3 Correction of errors 9
    4.2.4 Procedure for correction of errors 10

5 COMPUTATION OF COMPETITION RATING AND PILOT SCORES 10
  5.1 Overview 10
  5.2 Competition Rating 10
  5.3 Active Competition Period 11
    5.3.1 Active Competition Period of Category 1 events 11
    5.3.2 Active Competition Period of Category 2 events 11
  5.4 Competition Rating Calculation 11
  5.5 Competition Quality Factor 11
    5.5.1 Base Quality Factor of Category 1 events 12
    5.5.2 Base Quality Factor of Category 2 events 12
  5.6 Pilot's Rating Score 12
  5.7 Pilot's Score calculation 13
  5.8 Pilot Ranking 14

6 COUNTRY SCORES 14

7 COMPETITIONS USING THE SAILPLANE GRAND PRIX RULES 14
  7.1 Rating of Sailplane Grand Prix 14
  7.2 Pilots Rating score 14
FAI SPORTING CODE Section 3 – Gliding
Annex D - Rules for the Official IGC Pilot Ranking List

2020 EDITION

CHANGE RECORD
(Baseline: rev 2019_1.0)

Note: Due to the nature of the IGC Ranking List system all changes concerning the actual calculation are applied retroactively also to all previously held championships.

SIGNIFICANT CHANGES

5.5 Competition Quality Factor
Reduction of QF now only by age of event, as per approved proposal 6.3.4 at the IGC Plenary 2020. (introduced: rev. 2020-1.0)

7.2 Pilots Rating score
New formula as per approved proposal 6.3.3 at the IGC Plenary 2020 (introduced: rev. 2020-1.0, corrected rev. 2020-1.2)

MINOR CHANGES

5.2 Competition Rating
Clarified that JWGC and WWGC are examples of “restricted entry” and therefore Cat 1 standard applies (introduced: rev. 2019-1.2)

5.4 Competition Rating Calculation
Clarification that pilots with total score = 0 are to be excluded from the calculation (introduced: rev. 2019-1.4)

5.5 Competition Quality Factor
Clarification that pilots with total score = 0 are to be excluded from the calculation (introduced: rev. 2019-1.4)

5.6 Pilot’s Rating Score
Clarified the rules for Two Seater teams and the responsibility of the competition organizer to point out P1 (according to approved proposal 8.3.5 at the IGC Plenary 2019), as well as included an example of an invalid team setup in Cat2 events and how to handle such situation. (introduced: revs. 2019-1.0, 2019-1.3, 2020-1.0)

5.7 Pilot’s Score calculation
Included clarifying example and note that also “HC” pilots receive Ranking Points (introduced: revs. 2019-1.5, 2020-1.1)
GENERAL

1.1 PURPOSE OF ANNEX
This Annex is published to provide rules and procedures for the Official IGC Pilot Ranking List (hereafter called the “Ranking List”). The Ranking List shall provide a ranking of Individual pilots as well as countries. Published at http://www.fai.org/gliding/rankings.

1.2 BACKGROUND
The Ranking List was established in 2001 and became active from January 2003. At the FAI International Gliding Commission (IGC) Plenum meeting held in Lausanne in March 2006, it was decided that, considering the maturity of the Ranking List and rule set driving the Ranking List, it was reasonable to review the existing rule set, and convert them into an Annex to the FAI Sporting Code Section 3, Gliding.

The establishment of a Ranking List for countries was likewise adopted at the meeting in Lausanne in 2006, and has been included in this Annex.

2 OBJECTIVES
The objectives of the IGC Official Ranking System are

- to represent as accurately as possible the relative performance of competition pilots from their results in national and international soaring competitions
- to promote soaring competition
- to create a focus for promotion of competitive soaring
- to promote the development of a high quality international competition structure
- to create resources within the IGC to enable them to raise the standard of IGC category 1 soaring competitions and improve contact between the media and Soaring.

The IGC ranking system provides an official seeding list of competition glider pilots participating in International contests and contests sanctioned for inclusion.

The Ranking List is updated after each competition.

The Ranking List has three main components: Competition Rating, Pilot Scores and Country Scores.

- The Competition Rating depends on the type of competition, the quality of the pilots competing and the number of competition days.

- The Pilots score is the result of their performance in IGC sanctioned competitions. It is calculated using their personal score relative to that of the winner's and the Competition Rating.

- A Country’s Score is based on the average of the 5 highest ranked pilots of that country.
3 SANCTIONED COMPETITIONS

3.1 CATEGORY 1 EVENTS

All IGC category 1 events i.e. World and Continental Championships and Sailplane Grand Prix Finals are automatically included in the Ranking List as category 1 events.

3.2 CATEGORY 2 EVENTS

The results of other international competitions or national championships may also be included in the Ranking List under the following conditions.

They must be organised with the authorization of the relevant National Aero Club (NAC).

They must be approved by the IGC and pay the appropriate sanction fee.

In Nationals Championships, only the results of pilots holding a valid FAI Sporting Licence can be taken into account.

Qualifying Sailplane Grand Prix contests, also rated as Category 2 events, are automatically included in the Ranking List.

3.3 COMPETITION SANCTION FEE

The competition sanction fees will be paid according to the conditions referred to on the Ranking List web page “Enter Competition”.

The levels of Sanction fees are determined by the IGC bureau.

4 RANKING LIST MANAGEMENT AND ADMINISTRATION

4.1 MANAGEMENT

The Ranking List is managed and administrated by an IGC Ranking List Manager and an IGC Ranking List Administrator.

The IGC Ranking List Manager is responsible to the IGC for the satisfactory operation of the Ranking List. Comments, complaints or queries about any of the items below shall be directed to the IGC Ranking List Manager:

- Queries regarding the rules, or how the system works;
- Queries relating to your position in the Ranking List;
- Registration of a competition for inclusion in the Ranking List.

Amendment of pilot or competition details shall be directed to the IGC Ranking List Administrator.

Contact details can be found at the FAI/IGC web site.
4.2 INCLUSION OF COMPETITION RESULTS

(The exact time of all deadlines stated below is 24:00:00 UTC.)

4.2.1 Submission of results

The Competition Organizer is responsible for the provision of the final results from the competition.

Results should be submitted within 15 days of the completion of the competition in one of the formats specified on the Ranking List webpage if not otherwise agreed with the Ranking List team.

As a Competition Season runs from October 1st of the previous year to September 30th of the current year, results shall be submitted for inclusion no later than October 31st. Later submissions will not be uploaded and the fee paid will be forfeited.

Example: Competition Season 2019 runs from October 1st, 2018 to September 30th, 2019. Results for any gliding event of the Competition Season 2019 are to be submitted no later than October 31st, 2019.

Results shall include every competitor's Ranking List Identifier, otherwise they are regarded as incomplete and returned to the Competition Organizer for adjustment.

Note: The submission deadline above applies to the complete result, i.e. submitting results without RL-ids, thus incomplete results before October 31st but then failing to submit adjusted results before that date means that the deadline has not been met and the results are not eligible for inclusion.

If a pilot is not previously registered in the Ranking List, his/her Ranking List identifier should be obtained by registering the pilot on the RL web site.

The Ranking List will normally be updated not later than one week after the reception of the results. In urgent cases the RL team can be contacted to upload results sooner.

Final rankings for the recent Competition Season will be calculated and published based on the data included in the Ranking List on December 31st. For practical reasons Preliminary Final Rankings will be calculated and published soon after September 30th based on the data included in the Ranking List by the date of calculation.

Example: Competition Season 2019 runs from October 1st, 2018 to September 30th, 2019. Final rankings for the Competition Season 2019 will be calculated and published based on the RL data from December 31st, 2019. Soon after September 2019 the RL team will calculate and publish Preliminary Final Rankings for the Competition Season 2019. Without this pilots flying in the Southern Hemisphere and producing results for the Competition Season 2020 during the remainder of the Calendar Year 2019 would have to wait for their updated rankings based on the new results until January 1st, 2020.

4.2.2 Pilot details

Basic pilot details such as name and nationality will be taken from the Ranking List. For pilots currently not registered basic details will be taken the material provided by the Competition Organizer. (The pilots Nationality should be given as the country in which his/her sporting licence is issued. IOC Country Codes are to be used).

The pilot can provide additional information directly via the web interface or by contacting the IGC Ranking System Administrator.

4.2.3 Correction of errors

Results are continuously updated and the pilots are therefore encouraged to regularly check their RL profile.
If there are any errors or omissions the organiser or competing pilot shall contact the RL Administrator with the relevant details at the latest by December 31st of the year the Competition Season’s end.

**Example:** Competition Season 2019 runs from October 1st, 2018 to September 30th, 2019. Requests for correction of errors are to be submitted no later than December 31st, 2019.

Requests for correction of errors after above deadline will still be honoured but the final rankings for the Competition Season concerned will not be updated in retrospect.

**Note:** This is of concern to pilots who, for example have failed to provide their correct RL-id or have been assigned a newly created RL-id instead of using their pre-existing one. Notifying the RL team of such errors after above deadline means that the final rankings of the Competition Season concerned will not be changed, but the pilot’s ranking in the Competition Season currently on-going might be positively affected.

### 4.2.4 Procedure for correction of errors

All requests for correction to pilot or competition details shall be made on line via email to the Ranking List Manager or Ranking List Administrator.

In the event of any dispute regarding the entry of a Competition’s results or a pilot’s details, the organiser or pilot may make a direct appeal to the IGC Bureau who will decide the matter with finality. Any appeal should be made via the IGC secretary.

## 5 COMPUTATION OF COMPETITION RATING AND PILOT SCORES

### 5.1 OVERVIEW

Both Competition Rating and Pilot Scores are expressed as a number from 0 to 1000. Furthermore, a Quality Factor is defined for each Competition, as a number between 0 and 1.

- The Competition Rating depends on the type of competition and on the quality of the pilots competing.
- The Pilot Scores is the result of his/her performance in IGC sanctioned competitions.
- The Quality Factor depends on the number of competing pilots and the number of competition days. The Quality Factor will reduce with the age of a contest.

### 5.2 COMPETITION RATING

Each contest can have several qualifying competitions, one for each separately scored class in the contest. For ranking purposes, competitions are divided into the following categories:

- **Cat 1+:** First Category FAI Competitions such as World Championships in each of the FAI classes and the Sailplane Grand Prix Finals.

  **Note:** This means that Junior WGC and Women WGC are Cat 1 standard. Definition of these restricted entries is made in Sporting Code 3D Annex A section 1.3.4 “Competitions with restricted entries”.

- **Cat 1 standard:** First Category FAI events with restricted entry and continental championships, or any other international event approved by IGC as First Category.

- **Cat 2:** Any other International Competitions or National Championships sanctioned by the IGC for Ranking List inclusion. All Qualifying Sailplane Grand Prix contests are approved as Category 2 events and automatically included in the Ranking List. For advice on competition approval see chapter 3 “Sanctioned Competitions”.
5.3  ACTIVE COMPETITION PERIOD

5.3.1  Active Competition Period of Category 1 events
For Category 1 events a maximum of two events in a sequence is scored. The active Competition Period is limited by a maximum of 5 years.

5.3.2  Active Competition Period of Category 2 events
For Category 2 events the active Competition Period is limited by a maximum of 4 years.

5.4  COMPETITION RATING CALCULATION

Competition ratings are calculated using the Pilot Scores (\(PS\)) of the 5 highest ranked pilots finishing in the top half of a contest by position, or scoring more than 85% of the winners score.

\[
\text{Competition\_Rating} = 0.1 \times (5 \times \text{Maximum\_Rating} + PS1 + PS2 + PS3 + PS4 + PS5 + 100)
\]

The competition rating is limited within the range appropriate to the Competition category outlined below. A minimum Pilot Score is also outlined below and will be used in the event that a greater Pilot Score cannot be achieved by the five highest ranked pilots.

<table>
<thead>
<tr>
<th>Competition category</th>
<th>Cat 1+</th>
<th>Cat 1 std</th>
<th>Cat 2+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Rating</td>
<td>1000</td>
<td>980</td>
<td>960</td>
</tr>
<tr>
<td>Minimum Rating</td>
<td>960</td>
<td>900</td>
<td>800</td>
</tr>
<tr>
<td>Minimum Pilots Score</td>
<td>900</td>
<td>800</td>
<td>620</td>
</tr>
</tbody>
</table>

Note: The number of pilots used for the calculations above includes only competitors with a total score \(>0\). Any pilot with status DNF (Did Not Fly) every single competition day is to be considered a non-competitor and has to be purged from the entry list. Pilots with total score of 0 but at least one competition day where the status is other than DNF, for example DNS or a penalty zeroing the day’s pilot score, are considered to have taken part in the competition and are thus to be included in the entry list.

5.5  COMPETITION QUALITY FACTOR

The maximum Rating a pilot can achieve from a given competition is limited by the quality factor. The Base quality factor reduces with the age of a contest.

\[
\text{Quality\_Factor} = \text{Base\_quality\_factor} \times \text{Entry\_factor} \times \text{Day\_factor}
\]

with:

\[
\text{Entry\_factor} = \min((\text{number of pilots with score } > 0) / 10), 1)
\]

\[
\text{Day\_factor} = \min((\text{number of valid tasks}) / 4), 1)
\]

Note 1: The \(\min(a, b)\) function calculates the lesser of \(a\) and \(b\), putting both factors in the range of 0 to 1.

Note 2: The number of pilots used for the calculation of Entry\_factor according to the equation above includes only competitors with a total score \(>0\). Any pilot with status DNF (Did Not Fly) every single competition day is to be considered a non-competitor and has to be purged from the entry list. Pilots with total score of 0 but at least one competition day where the status is other than DNF, for example DNS or a penalty zeroing the day’s pilot score, are considered to have taken part in the competition and are thus to be included in the entry list.
5.5.1 **Base Quality Factor of Category 1 events**

<table>
<thead>
<tr>
<th>Base_quality_factor</th>
<th>All Cat1 events</th>
</tr>
</thead>
<tbody>
<tr>
<td>From end of event until 2 years + 3 months after</td>
<td>0.80</td>
</tr>
<tr>
<td>From 2 years + 3 months after end of event until</td>
<td></td>
</tr>
<tr>
<td>4 years + 3 months after end of event</td>
<td>0.60</td>
</tr>
<tr>
<td>From 4 years + 3 months after end of event</td>
<td>0</td>
</tr>
</tbody>
</table>

5.5.2 **Base Quality Factor of Category 2 events**

<table>
<thead>
<tr>
<th>Base_quality_factor</th>
<th>Cat 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>From end of event until 1 year + 3 months after</td>
<td>0.60</td>
</tr>
<tr>
<td>Reduction per year, starting 1 year + 3 months after the end of the event</td>
<td>0.15</td>
</tr>
</tbody>
</table>

5.6 **PILOT’S RATING SCORE**

All competing pilots in a sanctioned competition will receive a Rating Score from that competition.

The Pilot Rating Score for Two Seater entries and entries shared by more than one pilot will be awarded to the pilot with the highest Ranking at the start of the competition. This pilot needs to fly all days of the competition. If neither pilot has a current ranking it is the pilot nominated as first pilot or P1. In both cases it is the responsibility of the Competition Organizer to determine the pilot to whom the ranking score shall be attributed and clearly state her/him as P1 in the result list.

*Note 1:* Since competitions can be held consecutively and the submission of results from prior contests might be delayed a situation can arise where the pilot pointed out as P1 in the beginning of the competition in retrospect has had a lower ranking as the P2. In any such case P1 shall be the pilot having the higher ranking in the RL as published 00:00:00 UTC on the first day of the competition (with first day being the first calendar day where flying could have been scheduled). It is the recommended that the Competition Organizer saves a snapshot of the Ranking List or for the pilots in question in order to provide proof in case of later complaints. The RL team also provides the functionality for such snapshot.

*Note 2:* In Cat1 events the team must consist of the same pilots throughout the competition and both pilots need to fly each competition day. For Cat2 events it is possible to have a team consisting of a P1 who flies all days of the competitions and multiple P2’s (even as far as having a new P2 each day) as long as each P2 has lower ranking than the P1. If at any day throughout the competition a P2 has a higher ranking than the designated P1 the original team’s performance is to be set to “DNF” (Did Not Fly) that day and a new team, flying the same plane, is to be created, consisting of the originally designated P1 but in this new constellation considered P2 due to his/her lower ranking, and the newly added, higher ranked other pilot designated as P1. This new team is to be added as a full competitor, receiving day score for the days flown in this specific combination of P1+P2 and “DNF” otherwise. Alternatively, if all pilots designated as P1 throughout the competition choose to forfeit their ranking points they can be assigned to a newly created generic pilot, for example named “(team)”, with status set to “HC” and “deceased” so that this generic pilot can never be reused. In such case the IGC Ranking List team must be notified as this alternative involves manual intervention.
The competition winner’s Rating Score is equal to the Competition’s Rating. All the other competing pilots receive a Rating Score proportional to their final scores.

\[
\text{Rating\_score} = \text{Competition\_Rating} \times \frac{\text{Pilot\_score}}{\text{Winner\_score}}
\]

### 5.7 PILOT’S SCORE CALCULATION

The Pilot Score is calculated from the best Rating Scores achieved, taking into account the Competitions Quality Factors.

Keep the best two Cat 1 competitions (those which yield pilot the best Rating Score). Discard all others based on Cat 1 competitions. Keep all Cat 2 Competitions without any number limitation.

Add a “virtual competition” whose Rating Score is pilot’s best Rating Score minus 200, with a Quality Factor of 1.

Sort all pilot’s Rating Scores by decreasing order.

Add the pilot’s Rating Scores multiplied by their Quality Factor together, until the sum of the Quality Factors is at or above 1.

If the sum of Quality Factors is greater than 1, then reduce the last Quality Factor so that the sum of Quality Factors be equal to 1.

If the Virtual Competition was used in this sum, further reduce the last Quality Factor so that the sum of Quality Factors be equal to 0.99, and complete to 1 using the pilots next Rating Score instead of Virtual Competition.

**Example:** To recap, in order to calculate the ranking points for a pilot, we rate their performance by Pilot Rating Score (PRS) descending. The winner of a comp gets the max PRS and other pilots get a PRS which is a ratio of their points relative to the winners points.

Consider a pilot with results as depicted in the screenshot to the right. This pilot’s best performance was in the WGC 2018. This comp was rated at 995.22 points, so the winner received a PRS of 995.22. The pilot thus gets the following Rating Points: 5723 / 5736 * 995.22 = 992.96.

This comp has a quality factor (QF) of 0.8, so the pilot can use 0.8 of the PRS to calculate ranking points. This yields 794.4 ranking points. There are now 0.2 remaining from 1.0 and we use the pilot’s next best performance which were the Europeans 2019. The pilot won this comp, but it is rated at 980 points, lower than the WGC 2018. Rating Points: 0.2 * 980 = 196. Sum: 794.4 + 196.0 = 990.4 total ranking points.

If this pilots flies no more comps, the WGC 2018 will be reduced to QF 0.6 when WGC 2020 is flown. Then the pilot’s total ranking points will reduce to 987.78 (0.6 * 992.96 = 595.78 + 0.4 * 980 = 392). As comps get older the amount of QF that pilots can use from them reduces, so newer comps have more relevance.

**Note:** Pilots who participate as “HC” are treated in the same manner as everyone else when it comes to the IGC Ranking List: they count in calculation of the Competition Rating and they receive Ranking Points for their respective performance. Participating as “HC” only means that the pilot concerned does not receive the official recognition of a place in the final result list for their respective performance due to some formality mismatch, like being of nationality A but participating in country B’s Nationals or flying a glider of deviating class (like being allowed to fly with a Two Seater in Standard Class). Their respective performance is still valid and thus generates Ranking Points.
5.8 PILOT RANKING

Pilots are ranked upon decreasing Pilot Scores. Ties are initially broken by the highest single pilot rating score if a tie still exists the pilot with the highest ranking on the 30th September of the preceding year will take precedence.

6 COUNTRY SCORES

The Ranking List web site will include a Ranking by country. A Country’s rating is defined as the average score of the 5 highest ranked pilots of that country. The Country Scores are updated after each contest is included in Ranking List.

Note: If the Ranking List Country Scores are to be used as a filter for entry into a competition, it is necessary to define a specific date on which the List will apply.

7 COMPETITIONS USING THE SAILPLANE GRAND PRIX RULES

7.1 RATING OF SAILPLANE GRAND PRIX

Sailplane Grand Prix World Finals will be rated as Category 1+. Qualifying SGPs will be rated as Category 2. All Grand Prix competitions will be subject to the application of Ranking List calculations as defined in section 5 of these rules to determine their Rating and Quality factor.

7.2 PILOTS RATING SCORE

Any pilot with a non-zero Pilot’s score in the final result list receives a Pilot Rating Score:

\[
\text{Rating\_Score} = 1000 - 20 \times \frac{20}{\text{Number\_of\_pilots}} \times (\text{Pilot\_place} - 1)
\]