

C.04 FIDE Swiss rules

C.04.1 Basic rules for Swiss Systems

The following rules are valid for each Swiss system unless explicitly stated otherwise.

- a The number of rounds to be played is declared beforehand.
- b Two players shall not play against each other more than once.
- c Should the number of players to be paired be odd, one player is unpaired. This player receives a pairing-allocated bye: no opponent, no colour and as many points as are rewarded for a win, unless the rules of the tournament state otherwise.
- d A player who has already received a pairing-allocated bye, or has already scored a (forfeit) win due to an opponent not appearing in time, shall not receive the pairing-allocated bye.
- e In general, players are paired to others with the same score.
- f For each player the difference between the number of black and the number of white games shall not be greater than +2 or less than -2.
Each system may have exceptions to this rule in the last round of a tournament.
- g No player shall receive the same colour three times in a row.
Each system may have exceptions to this rule in the last round of a tournament.
- h
 - 1 In general, a player is given the colour with which he played less games.
 - 2 If colours are already balanced, then, in general, the player is given the colour that alternates from the last one with which he played.
- i The pairing rules must be such transparent that the person who is in charge for the pairing can explain them.

C.04.2 General handling rules for Swiss Tournaments

A Pairing Systems

- 1 The pairing system used for a FIDE rated tournament shall be either one of the published FIDE Swiss Systems or a detailed written description of the rules shall be explicitly presented to the participants.
- 2 While reporting a tournament to FIDE, the Arbiter shall declare which of the official FIDE Swiss systems was used. If another system was used, the Arbiter shall submit the rules of this system for checking by the Systems of Pairings and Programs Commission (SPPC).
- 3 Accelerated methods are acceptable if they were announced in advance by the organizer and are not biased in favour of any player.

- 4 The FIDE Swiss Rules pair the players in an objective and impartial way, and different arbiters or software programs following the pairing rules should arrive at identical pairings.
- 5 It is not allowed to alter the correct pairings in favour of any player.
Where it can be shown that modifications of the original pairings were made to help a player achieve a norm or a direct title, a report may be submitted to the Qualification Commission to initiate disciplinary measures through the Ethics Commission.

B Initial Order

- 1 Before the start of the tournament, a measure of the player's strength is assigned to each player. The strength is usually represented by rating lists of the players. If one rating list is available for all participating players, then this rating list should be used.
It is advisable to check all ratings supplied by players. If no reliable rating is known for a player, the arbiters should make an estimation of it as accurately as possible.
- 2 Before the first round the players are ranked in order of, respectively
 - [a] Strength (rating)
 - [b] FIDE-title (GM-IM-WGM-FM-WIM-CM-WFM-WCM-no title)
 - [c] alphabetically (unless it has been previously stated that this criterion has been replaced by another one)
- 3 This ranking is used to determine the pairing numbers; the highest one gets #1 etc.
If, for any reason, the data used to determine the rankings were not correct, they can be adjusted at any time. The pairing numbers may be reassigned accordingly to the corrections, but only for the first three rounds. No modification of a pairing number is allowed after the fourth round.

C Late Entries

- 1 According to FIDE Tournament Rules, any prospective participant who has not arrived at the venue of a FIDE competition before the time scheduled for the drawing of lots shall be excluded from the tournament unless he shows up at the venue in time before a pairing of another round.
An exception may be made in the case of a registered participant who has given written notice in advance that he will be unavoidably late.
- 2 Where the Chief Arbiter decides to admit a latecomer,
 - if the player's notified time of arrival is in time for the start of the first round, the player is given a pairing number and paired in the usual way.
 - if the player's notified time of arrival is in time only for the start of the second (or third) round ("Late Entry"), then the player is not paired for the rounds which he cannot play. Instead, he receives no points for unplayed rounds (unless the rules of the tournament say otherwise), and is given an appropriate pairing number and paired only when he actually arrives.
- 3 If there are late entries, the Pairing Numbers that were given at the start of the tournament are considered provisional. The definitive Pairing Numbers are given only when the List of Participants is closed, and corrections made accordingly in the results charts.

D Pairing, colour and publishing rules

- 1 Adjourned games are considered draws for pairing purposes only.
- 2 A player who is absent without notifying the arbiter will be considered as withdrawn, unless the absence is explained with acceptable arguments before the next pairing is published.
- 3 Players who withdraw from the tournament will no longer be paired.
- 4 Players known in advance not to play in a particular round are not paired in that round and score zero (unless the rules of the tournament say otherwise).
- 5 Only played games count in situations where the colour sequence is meaningful. So, for instance, a player with a colour history of BWB=W (i.e. no valid game in round-4) will be treated as if his colour history was =BWBW. WB=WB will count as =WBWB, BWW=B=W as ==BWBBW and so on.
- 6 Two paired players, who did not play their game, may be paired together in a future round.
- 7 The results of a round shall be published at the usual place of communication at announced time due to the schedule of the tournament.
- 8 If either
 - a result was written down incorrectly, or
 - a game was played with the wrong colours, or
 - a player's rating has to be corrected (and playing numbers possibly recomputed as in C.04.2.C.3),

and a player communicates this to the arbiter within a given deadline after publication of results, the new information shall be used for the standings and the pairings of the next round. The deadline shall be fixed in advance according to the timetable of the tournament.

If the error notification is made after the pairing but before the end of the next round, it will affect the next pairing to be done.

If the error notification is made after the end of the next round, the correction will be made after the tournament for submission to rating evaluation only.

- 9 After a pairing is complete, sort the pairs before publishing them.
The sorting criteria are (with descending priority)
 - the score of the higher ranked player of the involved pair;
 - the sum of the scores of both players of the involved pair;
 - the rank according to the Initial Order (C.04.2.B) of the higher ranked player of the involved pair.
- 10 Once published, the pairings shall not be changed unless they are found to violate C.04.1.b (*Two players shall not play against each other more than once*).

C.04.3 FIDE (Dutch) System

Version approved at the 87th FIDE Congress in Baku 2016

A Introductory Remarks and Definitions

A.1 Initial ranking list

See C.04.2.B (General Handling Rules - Initial order)

A.2 Order

For pairings purposes only, the players are ranked in order of, respectively

a score

b pairing numbers assigned to the players accordingly to the initial ranking list and subsequent modifications depending on possible late entries or rating adjustments

A.3 Scoregroups and pairing brackets

A scoregroup is normally composed of (all) the players with the same score. The only exception is the special "collapsed" scoregroup defined in A.9.

A (pairing) bracket is a group of players to be paired. It is composed of players coming from one same scoregroup (called resident players) and of players who remained unpaired after the pairing of the previous bracket.

A (pairing) bracket is homogeneous if all the players have the same score; otherwise it is heterogeneous.

A remainder (pairing bracket) is a sub-bracket of a heterogeneous bracket, containing some of its resident players (*see B.3 for further details*).

A.4 Floaters and floats

a A downfloater is a player who remains unpaired in a bracket, and is thus moved to the next bracket. In the destination bracket, such players are called "moved-down players" (MDPs for short).

b After two players with different scores have played each other in a round, the higher ranked player receives a downfloat, the lower one an upfloat.

A player who, for whatever reason, does not play in a round, also receives a downfloat.

A.5 Byes

See C.04.1.c (*Should the number of players to be paired be odd, one player is unpaired. This player receives a pairing-allocated bye: no opponent, no colour and as many points as are rewarded for a win, unless the regulations of the tournament state otherwise*).

A.6 Colour differences and colour preferences

The colour difference of a player is the number of games played with white minus the number of games played with black by this player.

The colour preference is the colour that a player should ideally receive for the next game. It can be determined for each player who has played at least one game.

a An absolute colour preference occurs when a player's colour difference is greater than +1 or less than -1, or when a player had the same colour in the two latest rounds he played. The preference is white when the colour difference is less than -1 or when the last two games were played with black. The preference is black when the colour difference is greater than +1, or when the last two games were played with white.

- b A strong colour preference occurs when a player's colour difference is +1 (preference for black) or -1 (preference for white).
- c A mild colour preference occurs when a player's colour difference is zero, the preference being to alternate the colour with respect to the previous game he played.
- d Players who did not play any games have no colour preference (the preference of their opponents is granted).

A.7 **Topscorers**

Topscorers are players who have a score of over 50% of the maximum possible score when pairing the final round of the tournament.

A.8 **Pairing Score Difference (PSD)**

The pairing of a bracket is composed of pairs and downfloaters.

Its Pairing Score Difference is a list of score-differences (*SD*, see below), sorted from the highest to the lowest.

For each pair in a pairing, the SD is defined as the absolute value of the difference between the scores of the two players who constitute the pair.

For each downfloater, the SD is defined as the difference between the score of the downfloater, and an artificial value that is one point less than the score of the lowest ranked player of the current bracket (even when this yields a negative value).

Note: The artificial value defined above was chosen in order to be strictly less than the lowest score of the bracket, and generic enough to work with different scoring-point systems and in presence of non-existent, empty or sparsely populated brackets that may follow the current one.

PSD(s) are compared lexicographically (*i.e. their respective SD(s) are compared one by one from first to last - in the first corresponding SD(s) that are different, the smallest one defines the lower PSD*).

A.9 **Round-Pairing Outlook**

The pairing of a round (called round-pairing) is complete if all the players (except at most one, who receives the pairing-allocated bye) have been paired and the absolute criteria C1-C3 have been complied with.

If it is impossible to complete a round-pairing, the arbiter shall decide what to do. Otherwise, the pairing process starts with the top scoregroup, and continues bracket by bracket until all the scoregroups, in descending order, have been used and the round-pairing is complete.

However, if, during this process, the downfloaters (possibly none) produced by the bracket just paired, together with all the remaining players, do not allow the completion of the round-pairing, a different processing route is followed. The last paired bracket is called Penultimate Pairing Bracket (PPB). The score of its resident players is called the "collapsing" score. All the players with a score lower than the collapsing score constitute the special "collapsed" scoregroup mentioned in A.3.

The pairing process resumes with the re-pairing of the PPB. Its downfloaters, together with the players of the collapsed scoregroup, constitute the Collapsed Last Bracket (CLB), the pairing of which will complete the round-pairing.

Note: Independently from the route followed, the assignment of the pairing-allocated bye (see C.2) is part of the pairing of the last bracket.

Section B describes the pairing process of a single bracket.

Section C describes all the criteria that the pairing of a bracket has to satisfy.

Section E describes the colour allocation rules that determine which players will play with white.

B Pairing Process for a bracket

B.1 Parameters definitions

- a M0 is the number of MDP(s) coming from the previous bracket. It may be zero.
- b MaxPairs is the maximum number of pairs that can be produced in the bracket under consideration (*see C.5*).

Note: MaxPairs is usually equal to the number of players divided by two and rounded downwards. However, if, for instance, M0 is greater than the number of resident players, MaxPairs is at most equal to the number of resident players.

- c M1 is the maximum number of MDP(s) that can be paired in the bracket (*see C.6*).

Note: M1 is usually equal to the number of MDPs coming from the previous bracket, which may be zero. However, if, for instance, M0 is greater than the number of resident players, M1 is at most equal to the number of resident players. Of course, M1 can never be greater than MaxPairs.

B.2 Subgroups (original composition)

To make the pairing, each bracket will be usually divided into two subgroups, called S1 and S2.

S1 initially contains the highest N1 players (sorted according to A.2), where N1 is either M1 (*in a heterogeneous bracket*) or MaxPairs (*otherwise*).

S2 initially contains all the remaining resident players.

When M1 is less than M0, some MDPs are not included in S1. The excluded MDPs (*in number of $M0 - M1$*), who are neither in S1 nor in S2, are said to be in a *Limbo*.

Note: the players in the Limbo cannot be paired in the bracket, and are thus bound to double-float.

B.3 Preparation of the candidate

S1 players are tentatively paired with S2 players, the first one from S1 with the first one from S2, the second one from S1 with the second one from S2 and so on.

In a homogeneous bracket: the pairs formed as explained above and all the players who remain unpaired (bound to be downfloaters) constitute a candidate (pairing).

In a heterogeneous bracket: the pairs formed as explained above match M1 MDPs from S1 with M1 resident players from S2. This is called a MDP-Pairing. The remaining resident players (*if any*) give rise to the remainder (*see A.3*), which is then paired with the same rules used for a homogeneous bracket.

Note: M1 may sometimes be zero. In this case, S1 will be empty and the MDP(s) will all be in the Limbo. Hence, the pairing of the heterogeneous bracket will proceed directly to the remainder.

A candidate (pairing) for a heterogeneous bracket is composed by a MDP-Pairing and a candidate for the ensuing remainder. All players in the Limbo are bound to be downfloaters.

B.4 Evaluation of the candidate

If the candidate built as shown in B.3 complies with all the absolute and completion criteria (*from C.1 to C.4*), and all the quality criteria from C.5 to C.19 are fulfilled, the candidate is called "perfect" and is (immediately) accepted. Otherwise, apply B.5 in order to find a perfect candidate; or, if no such candidate exists, apply B.8.

B.5 Actions when the candidate is not perfect

The composition of S1, Limbo and S2 has to be altered in such a way that a different candidate can be produced.

The articles B.6 (for homogeneous brackets and remainders) and B.7 (for heterogeneous brackets) define the precise sequence in which the alterations must be applied.

After each alteration, a new candidate shall be built (*see B.3*) and evaluated (*see B.4*).

B.6 Alterations in homogeneous brackets or remainders

Alter the order of the players in S2 with a transposition (*see D.1*). If no more transpositions of S2 are available for the current S1, alter the original S1 and S2 (*see B.2*) applying an exchange of resident players between S1 and S2 (*see D.2*) and reordering the newly formed S1 and S2 according to A.2.

B.7 Alterations in heterogeneous brackets

Operate on the remainder with the same rules used for homogeneous brackets (*see B.6*).

Note: The original subgroups of the remainder, which will be used throughout all the remainder pairing process, are the ones formed right after the MDP-Pairing. They are called S1R and S2R (to avoid any confusion with the subgroups S1 and S2 of the complete heterogeneous bracket).

If no more transpositions and exchanges are available for S1R and S2R, alter the order of the players in S2 with a transposition (*see D.1*), forming a new MDP-Pairing and possibly a new remainder (to be processed as written above).

If no more transpositions are available for the current S1, alter, if possible (i.e. if there is a Limbo), the original S1 and Limbo (*see B.2*), applying an exchange of MDPs between S1 and the Limbo (*see D.3*), reordering the newly formed S1 according to A.2 and restoring S2 to its original composition.

B.8 Actions when no perfect candidate exists

Choose the best available candidate. In order to do so, consider that a candidate is better than another if it better satisfies a quality criterion (C5-C19) of higher priority; or, all quality criteria being equally satisfied, it is generated earlier than the other one in the sequence of the candidates (*see B.6 or B.7*).

C Pairing Criteria

Absolute Criteria

No pairing shall violate the following absolute criteria:

C.1 *see C.04.1.b (Two players shall not play against each other more than once)*

C.2 *see C.04.1.d (A player who has already received a pairing-allocated bye, or has already scored a (forfeit) win due to an opponent not appearing in time, shall not receive the pairing-allocated bye).*

C.3 non-topscorers (*see A.7*) with the same absolute colour preference (*see A6.a*) shall not meet (*see C.04.1.f and C.04.1.g*).

Completion Criterion

C.4 if the current bracket is the PPB (*see A.9*): choose the set of downfloaters in order to complete the round-pairing.

Quality Criteria

To obtain the best possible pairing for a bracket, comply as much as possible with the following criteria, given in descending priority:

- C.5 maximize the number of pairs (*equivalent to: minimize the number of downfloaters*).
- C.6 minimize the PSD (*This basically means: maximize the number of paired MDP(s); and, as far as possible, pair the ones with the highest scores*).
- C.7 if the current bracket is neither the PPB nor the CLB (*see A.9*): choose the set of downfloaters in order first to maximize the number of pairs and then to minimize the PSD (*see C.5 and C.6*) in the following bracket (*just in the following bracket*).
- C.8 minimize the number of topscorers or topscorers' opponents who get a colour difference higher than +2 or lower than -2.
- C.9 minimize the number of topscorers or topscorers' opponents who get the same colour three times in a row.
- C.10 minimize the number of players who do not get their colour preference.
- C.11 minimize the number of players who do not get their strong colour preference.
- C.12 minimize the number of players who receive the same downfloat as the previous round.
- C.13 minimize the number of players who receive the same upfloat as the previous round.
- C.14 minimize the number of players who receive the same downfloat as two rounds before.
- C.15 minimize the number of players who receive the same upfloat as two rounds before.
- C.16 minimize the score differences of players who receive the same downfloat as the previous round.
- C.17 minimize the score differences of players who receive the same upfloat as the previous round.
- C.18 minimize the score differences of players who receive the same downfloat as two rounds before.
- C.19 minimize the score differences of players who receive the same upfloat as two rounds before.

D Rules for the sequential generation of the pairings

Before any transposition or exchange take place, all players in the bracket shall be tagged with consecutive in-bracket sequence-numbers (BSN for short) representing their respective ranking order (according to A.2) in the bracket (*i.e. 1, 2, 3, 4, ...*).

D.1 Transpositions in S2

A transposition is a change in the order of the BSNs (*all representing resident players*) in S2. All the possible transpositions are sorted depending on the lexicographic value of their first N1 BSN(s), where N1 is the number of BSN(s) in S1 (*the remaining BSN(s) of S2 are ignored in this context, because they represent players bound to constitute the remainder in case of a heterogeneous bracket; or bound to downfloat in case of a homogeneous bracket - e.g. in a 11-player homogeneous bracket, it is 6-7-8-9-10, 6-7-8-9-11, 6-7-8-10-11, ..., 6-11-10-9-8, 7-6-8-9-10, ..., 11-10-9-8-7 (720 transpositions); if the bracket is heterogeneous with two MDPs, it is: 3-4, 3-5, 3-6, ..., 3-11, 4-3, 4-5, ..., 11-10 (72 transpositions)*).

D.2 Exchanges in homogeneous brackets or remainders (original S1 ↔ original S2)

An exchange in a homogeneous brackets (also called a resident-exchange) is a swap of two equally sized groups of BSN(s) (*all representing resident players*) between the original S1 and the original S2.

In order to sort all the possible resident-exchanges, apply the following comparison rules between two resident-exchanges in the specified order (*i.e. if a rule does not discriminate between two exchanges, move to the next one*).

The priority goes to the exchange having:

- a the smallest number of exchanged BSN(s) (*e.g. exchanging just one BSN is better than exchanging two of them*).
- b the smallest difference between the sum of the BSN(s) moved from the original S2 to S1 and the sum of the BSN(s) moved from the original S1 to S2 (*e.g. in a bracket containing eleven players, exchanging 6 with 4 is better than exchanging 8 with 5; similarly exchanging 8+6 with 4+3 is better than exchanging 9+8 with 5+4; and so on*).
- c the highest different BSN among those moved from the original S1 to S2 (*e.g. moving 5 from S1 to S2 is better than moving 4; similarly, 5-2 is better than 4-3; 5-4-1 is better than 5-3-2; and so on*).
- d the lowest different BSN among those moved from the original S2 to S1 (*e.g. moving 6 from S2 to S1 is better than moving 7; similarly, 6-9 is better than 7-8; 6-7-10 is better than 6-8-9; and so on*).

D.3 Exchanges in heterogeneous brackets (original S1 ↔ original Limbo)

An exchange in a heterogeneous bracket (also called a MDP-exchange) is a swap of two equally sized groups of BSN(s) (*all representing MDP(s)*) between the original S1 and the original Limbo.

In order to sort all the possible MDP-exchanges, apply the following comparison rules between two MDP-exchanges in the specified order (*i.e. if a rule does not discriminate between two exchanges, move to the next one*) to the players that are in the new S1 after the exchange.

The priority goes to the exchange that yields a S1 having:

- a the highest different score among the players represented by their BSN (*this comes automatically in complying with the C.6 criterion, which says to minimize the PSD of a bracket*).
- b the lowest lexicographic value of the BSN(s) (sorted in ascending order).

Any time a sorting has been established, any application of the corresponding D.1, D.2 or D.3 rule, will pick the next element in the sorting order.

E Colour Allocation rules

Initial-colour

It is the colour determined by drawing of lots before the pairing of the first round.

For each pair apply (with descending priority):

- E.1 Grant both colour preferences.
- E.2 Grant the stronger colour preference. If both are absolute (topscorers, see A.7) grant the wider colour difference (see A.6).
- E.3 Taking into account C.04.2.D.5, alternate the colours to the most recent time in which one player had white and the other black.
- E.4 Grant the colour preference of the higher ranked player.
- E.5 If the higher ranked player has an odd pairing number, give him the initial-colour; otherwise give him the opposite colour.

Note: Always consider sections C.04.2.B/C (Initial Order/Late Entries) for the proper management of the pairing numbers.

C.04.4 Other FIDE-approved Pairing Systems

Use of these systems is deprecated unless for a system there is a FIDE endorsed program (*see, in Appendix C.04.A, the Annex-3 "List of FIDE Endorsed Programs"*) with a free pairing-checker (*see A.5 in the same appendix*) able to verify tournaments run with this system.

C.04.4.1 Dubov System

Approved by the 1997 General Assembly.

Preface:

The DUBOV Swiss Pairing System is designed to maximise the fair treatment of the players. This means that a player having a higher rating performance than another player during a tournament should have more points as well.

If the average rating of all players is nearly equal, like in a round robin tournament, the goal is reached. As a Swiss System is a more or less statistical system, this goal can only be reached approximately.

The approach is the attempt to equalise the average rating of the opponents of all players of a score group. Therefore the pairing of a round will pair players who have played low rated players before with players having high ratings now.

1. Introductory definitions

- 1.1 "R" is the rating of a player
- 1.2 "ARO" is the average rating of a player's opponents. ARO must be calculated after each round as basis of the pairings.
- 1.3 The "due colour of a player is white",
 - if he has played more games with black than with white before
 - if these numbers are equal and he has played black his previous game.
- 1.4 The "due colour of a player is black",
 - if he has played more games with white than with black before
 - if these numbers are equal and he has played white his previous game.

2. Pairings limitations

See Basic Rules, section C.04.1, rules b, c, d, g, f

- 2.1 Apart from the last round a player cannot be transferred to a higher score group two times running and more than three times (if the tournament has less than 10 rounds) or four times (if the tournament has more than 9 rounds) during one tournament.
- 2.2 A player shall not be transferred from the subgroup due to a colour to the subgroup due to the other colour if this would violate the limitations C.04.1.f or C.04.1.g.

3. Colour allocation

Pairing two players the colour allocation shall regard with descending priority:

- give both players their due colour
- equalise the numbers of black and white games played before
- alternate the colours of both players regarding the first difference of their colour history going back from the previous round to the first round.
- assign white to the player with the higher ARO
- assign white to the player with the lower R

4. Odd number of players at the tournament

The player from the lowest score group, who has the lowest R will get the pairing-allocated bye. If there are players with the lowest R in both the colour subgroups, then the player to get the pairing-allocated bye must be due to the dominating colour and in case there are several players with equal R, the player to get the pairing-allocated bye must have the higher ARO.

5. Pairing for the first round

The player's list calculated before is divided into two equal parts: The players from the upper part of the list are placed on the left and those from the lower part, on the right. The first player from the left-hand list plays the first player from the right-hand list, the second plays the second, etc. After that, the colour of the pieces is determined by drawing lots for one of the pairs, for example, for the first pair. In such a case, all odd-numbered pairs have the same colours as the first pair, whereas all even-numbered pairs have the other colour.

If the number of the players is odd, the last player in the list gets the pairing-allocated bye having no colour.

This pairing procedure leads to identical results as the procedures used within the other FIDE Swiss Systems.

6. The standard pairing procedure for the remaining rounds

6.1 Standard requirement (*Special cases see below chapter 7*)

The number of players having the same score is even and the number of players with due colour white and black is the same. Each player in the score group has at least one possible opponent in the score group.

6.2 First attempt

The players who should play with the white pieces are arranged in order of increasing ARO, the ARO being the same the player with the lower R is placed higher. If ARO and R coincide completely, the players are to be placed alphabetically.

The players who should play the black pieces are arranged in order of decreasing R, if R is the same, the player with the higher ARO is placed higher. If ARO and R coincide completely, the players are to be placed alphabetically.

Two columns of numbers are written down, thereby arranging the pairs.

For example:

White (ARO)	Black (R)
2310.0	2380
2318.4	2365
2322.3	2300
2333.7	2280
2340.5	2260
2344.6	2250

The names of the players are then written down, and only one fact is checked - whether the players have not played their opponents before.

6.3 Improvements

If the players have already played each other, then the "white" player is paired with the first "black" player whom he has not played before, from the lower rows.

If such a coincidence takes place in the last row for a group of players with the same score, then the last but one row is changed.

If a coincidence takes place in a row No. k of a group with the same score and all the "blacks" from the lower group have already played with the "white" No. k , then we change the pairing in row No. $k-1$, if this does not work, in row No. $k-2$, etc.

If the "white" No. k has already played with all the "blacks", we look for an opponent for him, beginning with the "white" No. $k+1$ down to the end of the column, and then, beginning with the "white" No. $k-1$ down to the "white" No. 1. The colours of the pairings are assigned due to the colour allocation rules.

6.4 Floater

The aim of the pairing procedure is to pair all players within a score group.

If that cannot be achieved the remaining unpaired players are transferred to the next lower score group and treated according to chapter 8.

If there is a choice the floaters should be chosen due to these characteristics with decreasing preference:

- a. the player was not floater from higher score groups and can be paired in the lower score group
- b. the player was not floater from higher score groups and cannot be paired in the lower score group
- c. the player was floater from higher score groups and can be paired in the lower score group
- d. the player was floater from higher score groups and cannot be paired in the lower score group

7. Transfer of players to meet the requirement of Chapter 6

If the requirement of the standard pairing procedure is not fully fulfilled the following transfers shall be carried out in the order listed below.

7.1 If a player has already played with all the players of his own score group, a player from the next possible lower score group is transferred to the score group to be paired who has not yet played with the player in question and can be paired according to the colour allocation rules

The player to be transferred should fulfil the following requirements with descending priority:

- a. the due colour is opposite to the due colour of the player in question.
- b. if there is a choice, then the player with the highest R is to be transferred.
- c. if there are more than one players having the same R then the one with the lowest ARO will be transferred.

7.2 If the number of players of the score group odd, a player from the next possible lower score group shall be transferred to the score group to be paired, who has not yet played with at least one of the players of the higher score group and is allowed to be paired according to the colour allocation rules.

This player to be transferred should fulfil the following requirements with descending priority:

- a. his due colour is opposite to the dominating due colour of the higher score group.
- b. if there is a choice, then the player with the highest R is to be transferred.
- c. if there are more than one players having the same R then the one with the lowest ARO will be transferred.

7.3 If the number of players in the score group is even and the number of Whites exceeds the Blacks by $2n$, then n "white" players, who have the lowest ARO, are transferred to the black group. If their ARO is equal, the player with the higher R is chosen. Should both (ARO and R) coincide completely, the list of the players is arranged alphabetically, the transfer being made from the upper half.

7.4 If the number of players with the same score is even and the number of Whites is smaller than the number of Blacks by $2n$, then n "black" players, who have the highest ARO, are transferred to the white group. If their ARO is equal, the player with the lower R is chosen. Should both (ARO and R) coincide completely, the list of the players is arranged alphabetically, the transfer being made from the upper half.

8. Treatment of floaters

8.1 Priority of floater-pairing

The floaters having due colour white are arranged according to chapter 6.2.

The floaters having due colour black are arranged according to chapter 6.2.

Beginning with the highest "white" floater the floaters are paired one by one going down to the lowest floater alternating between "white" and "black".

8.2 Pairing the floaters

Each of the floaters is paired with the player having the highest R, if possible having the opposite due colour. If there are more than one player with equal R, the player with the lowest ARO is chosen.

9. Final remarks.

The list of AROs should be published after each round to make it possible for the players to calculate the pairings on their own.

A situation which cannot be directly resolved by using the given instructions, the referee should proceed wisely and impartially in the spirit of the basic principles outlined above.

C.04.4.2 Burstein System

Preface:

The BURSTEIN Swiss Pairing System is designed to maximize the fair treatment of the players. This means that players having the same score should have met as equal opposition as possible during a tournament.

If the Sonneborn-Berger and/or Buchholz and/or Median, of all players in the same score-group, is nearly equal, the goal is reached. As a Swiss System is a more or less statistical system, this goal can only be reached approximately.

The approach is the attempt to equalize the strength of the opponents of all players in a given score group. Therefore the pairing of each round will tend to pair players who have high Sonneborn-Berger (or Buchholz or Median) with players having low Sonneborn-Berger (or Buchholz or Median) in the same score-group.

The ratings of the players should be taken into consideration only when the Sonneborn-Berger (or Buchholz or Median) is equal (e.g. in the first two rounds); otherwise, only current data of the tournament itself should be the basis for measuring the "strength" of the players and making the pairings thereafter.

1. Introductory definitions:

- 1.1 "R" is the rating of a player
- 1.2 "SG" (Score Group) is the group of players having the same number of points
- 1.3 The "due colour of a player" is the colour he played less times than the other colour. If he played the same number of both colours, than the "due colour of a player" is the alternate colour of which he played in the previous round.

2. Unfinished games:

Unfinished (or temporarily non played) games shall be considered as draws for pairing purposes.

3. Basic pairings principles:

- 3.1 Two players who have played each other shall not be paired again.
- 3.2 Before making the pairings in each round, players in every SG (including "floaters" from another SG) shall be arranged in the order of their (1) Sonneborn-Berger (SB); (2) Buchholz; (3) Median (4) rating. The player with the highest SB shall be No. 1 in the SG. Players with the same SB shall be arranged in the order of their Buchholz and so on.
- 3.3 For accelerating pairing, in the first two rounds, an 'imaginary' point shall be added to the score of each of the players in the top half of the initial list of participants (arranged in the order of their R). This imaginary point shall then be deducted before making the pairings of the third round.

4. Odd number of players at the tournament:

- 4.1 A player who has already received a point without playing shall not receive a pairing-allocated bye.
- 4.2 The player from the lowest SG, who has the lowest SB, will get the pairing-allocated bye.
- 4.3 If there are players with the same lowest SB in the lowest SG, then the player with the lowest Buchholz will get the pairing-allocated bye and so on.
- 4.4 The pairing-allocated bye has no colour.

5. Colour Allocation:

- 5.1 In the first round the colour assigned to player No.1 shall be decided by drawing a lot. All other odd numbered players in the top half of the initial list shall receive the same colour.
- 5.2 The difference of the number of black and the number of white games shall not be greater than +2 or less than -2.
- 5.3 A player shall not have the same colour three times in a row.
- 5.4 After pairing two players, colours shall be assigned based on giving descending priority to:
- giving both players their due colour
 - equalizing the numbers of black and white games played before
 - alternating the colours of both players regarding the first difference of their colour history going back from the previous round to the first round.
 - assigning his due colour to the player with the higher SB
 - assigning his due colour to the player with the higher Buchholz, and so on.

6. Pairing procedures:

- 6.1 In each SG priority shall be given to pair the highest player (i.e. the player with the highest SB) with the lowest player in that SG that he has not already played. The second highest player shall be paired with the second lowest player, etc.
- 6.2 To illustrate the procedure, suppose there are six players in a SG, ordered 1 through 6 as described in rule 3.2. There will be 15 combinations of pairing within the group, in the following descending order of priority:

1	1*6	2*5	3*4
2	1*6	2*4	3*5
3	1*6	2*3	4*5
4	1*5	2*6	3*4
5	1*5	2*4	3*6
6	1*5	2*3	4*6
7	1*4	2*6	3*5
8	1*4	2*5	3*6
9	1*4	2*3	5*6
10	1*3	2*6	4*5
11	1*3	2*5	4*6
12	1*3	2*4	5*6
13	1*2	3*6	4*5
14	1*2	3*5	4*6
15	1*2	3*4	5*6

- 6.3 If there is an uneven number of players in the SG, the same procedure is followed and the remaining player is floated to the next SG (provided he is not a floater from another SG) and is paired within this SG according to the same procedure.
- 6.4 To illustrate the procedure, suppose there are five players in a SG, ordered 1 through 5 as described in rule 3.2. There will be 15 combinations of pairing within the group, in the following descending order of priority ("F" = floater):

1	1*5	2*4	3*F
2	1*5	2*3	4*F
3	1*5	3*4	2*F
4	1*4	2*5	3*F
5	1*4	2*3	5*F
6	1*4	3*5	2*F
7	1*3	2*5	4*F
8	1*3	2*4	5*F
9	1*3	4*5	2*F
10	1*2	3*5	4*F
11	1*2	3*4	5*F
12	1*2	4*5	3*F
13	2*5	3*4	1*F
14	2*4	3*5	1*F
15	2*3	4*5	1*F

[If, for example, No. 2 is a floater from another SG, combinations (3), (6) & (9) are not valid].

- 6.5 In each SG maximum number of players should get their due colours. Suppose, for example, that the due colour of players 2, 4 and 5 is white, and that of the others is black; then the valid combination is No. (4) in rule 6.2 or No. (2) in rule 6.4.
- 6.6 If the SG from which the floater has been dropped is such that a complete pairing of all remaining teams in the SG cannot be made (or if the floater has already played every player in the next SG), then the floater shall be moved back to its original SG, trying the next possible combination according to the order of priority. If a complete pairing of all teams in two adjacent SG's cannot be made, then these two SG's shall be considered as one SG, and rules 6.1-6.5 shall accordingly apply.

C.04.4.3 Lim System

Approved by the General Assembly of 1987.

Amended by the 1988, 1989, 1997, 1998 General Assemblies and 1999 Executive Board.

General Pairing Rules

1 Awarding the pairing-allocated bye

- 1.1 In addition of what is stated in the basic rules (C.04.1.c), the pairing-allocated bye is awarded to the player with the lowest rank in the lowest score-group.

2 Pairing a Score-group

- 2.1 Two players who have not yet played each other are said to be compatible provided that the pairing will not require either player to have the same colour in three successive rounds, or to have three more of one colour than the other.

- 2.2 The players with the same score form a score-group. The Median Score-group is the score-group with players having the score equal to half the number of rounds that have been played. Pairing begins with the highest score-group and proceeds downward until just before the Median Score-group, then continues with the lowest score-group and proceeds upwards to the Median Score-Group which is paired last. The Median Score-group is paired downward.

- 2.3 Before the players in a score-group are paired, the players in the score-group who have no suitable opponents for the following reasons are identified and transferred to a neighbouring score-group:

- a. the player has already played all the players of his score-group; or
- b. the player has already received two more of one colour over an equal allocation and there is no compatible opponent available in the score-group to enable him to have a permissible colour; or
- c. the player has already received the same colour in the previous two rounds and there is no compatible player in the score-group to enable the player to have the alternate colour; or
- d. it is necessary to make even the number of players in the score-group

Such a transferred player is described as a floater. Rules on how to select the floater, if a choice is available, are given in the section on "Floater Selection Rules" (section 3).

- 2.4 The players in a score-group, after transfer of players where necessary, are arranged in the order of their pairing numbers and the players in the top half are tentatively paired with the players in the bottom half. These pairings are said to be proposed pairings, to be confirmed after scrutiny for compatibility and proper colour. If the players in a score-group are numbered : 1, 2, 3 ... n, then the proposed pairings are (ignoring colours): $1 \vee (n/2 + 1)$, $2 \vee (n/2 + 2)$, $3 \vee (n/2 + 3)$... $n/2 \vee n$.

- 2.5 Where a proposed pairing would result in the pairing of players who have already played each other, the lower numbered player of the two is exchanged for another within the same score-group. Further exchanges of opponents may be made to allow alternation or equalisation of colours where possible. How players are exchanged is described in the "Exchange Rules" (section 4).

2.6 Pairing a blocked median score-group

If the median score-group cannot be paired it should be extended step by step under the following rules:

- if the number of floaters from higher score-groups is larger than the number of floaters from lower score-groups the next pairing of the lower score-group shall be

cracked and the players of this pairing shall be treated as additional floaters from the lower score-group. Then the pairing of the median score-group is started again.

- if the above condition is not fulfilled, then the next pairing of the higher score-group shall be cracked and the players of this pairing shall be treated as additional floaters from the higher score-group. Then the pairing of the median score-group is started again.

3 Floater Selection Rules

3.1 The "floater" is a player who is transferred to another score-group in accordance with Rule 2.3, or because a compatible opponent cannot be found for the player in spite of exchanges in the score-group.

3.2 When pairing proceeds downward, the floater is transferred to the next lower score-group. When pairing proceeds upwards, the floater is transferred to the next higher score-group. When making even a score-group, determine the due colours of the players and select as the floater a player who would tend to equalise the number of players due different colours.

(In Maxi-tournaments, when pairing downward, the difference in rating between the chosen player and the lowest numbered player in the score-group must differ by 100 points or less, otherwise the lowest numbered player in the score-group is chosen as the floater. When pairing upwards, the difference in rating between the player chosen and the highest numbered player in the score-group must differ by 100 points or less, otherwise the highest numbered player is chosen as the floater.)

If the number of players due white equals the number of players due black, the lowest numbered player is chosen as the floater when pairing downward, and the highest numbered player is chosen as the floater when pairing upwards.

3.3 If there is a choice as to which player floats to a lower score-group, the player chosen is the lowest numbered player in the score-group who has a compatible opponent in the lower score-group, after excluding the opponents of other floaters who have higher scores or higher pairing numbers than the proposed floater.

3.4 If there is a choice as to which player floats to a higher score-group, the player chosen is the highest numbered player in the score-group who has a compatible opponent in the higher score-group, after excluding the opponents of other floaters who have lower scores or lower pairing numbers than the proposed floater.

3.5 If a proposed floater has no compatible opponent in the adjacent score-group, he shall, if possible, be exchanged for another player in his score-group; otherwise he shall be floated to a further score-group.

3.6 When pairing a group that includes floaters from a higher score-group, the floater with the highest score is paired first, or the floater with the highest pairing number, if scores are equal.

3.6.1 When pairing a group that includes down-floaters (DF) from a higher score-group, the floater with the higher pairing number is paired first.

3.6.2 When pairing a group with DF coming from different higher score-groups, the floater coming from the highest score group is paired first (not always the one with the highest pairing number).

3.6.3 When there are DF and UF (up-floaters) in the same score-groups (this should normally happen in the median score-group) in the upper half of score-groups or in the median group, first pair the DF, then the UF and finally the remaining players.

- 3.7 When pairing a group that includes floaters from a lower score-group, the floater with the lowest score is paired first, or the floater with the lowest pairing number, if scores are equal.
- 3.7.1 When pairing a group that includes UF from a lower score-group (in the 2nd half) the floater with the lowest pairing number is paired first.
- 3.7.2 When pairing a group that includes UF coming from different lower groups, the UF coming from the lowest score-group is paired first (not always the player with the highest pairing number).
- 3.7.3 When there are UF and DF in the same score group in the second half of score-groups, first pair the UF, then the DF, and finally the other remaining players.
- 3.8 When pairing downward, the floater is paired with the highest numbered player available who is due the alternate colour (provided, in Maxi-tournaments, that the ratings of proposed opponents who are exchanged for this purpose differ by 100 points or less). When pairing upwards, the floater is paired with the lowest numbered player available who is due the alternate colour (provided, in Maxi-tournaments, that the ratings of proposed opponents who are exchanged for this purpose differ by 100 points or less).
- 3.9 Due to their origin and their compatibility in the adjacent score-group there are 4 types of floaters listed in descending order of disadvantages.
- a floater who has already floated to the score-group just being handled and has no compatible opponent in the adjacent score-group.
 - a floater who has already floated to the score-group just being handled and has a compatible opponent in the adjacent score-group.
 - a floater who has no compatible opponent in the adjacent score-group.
 - a floater who has a compatible opponent in the adjacent score-group.
- If there is a choice the floaters should be chosen to minimise the disadvantages using the following priorities:
- avoid floater(s) of type a
 - avoid floater(s) of type b
 - avoid floater(s) of type c
- 3.10 A floater who has floated the round just before shall not be floated due to section 2.3.d provided:
- this will not produce other floaters of the types a, b, c of section 3.9
 - this will not decrease the number of pairings of that score-group

4. Exchange Rules

- 4.1 The proposed pairings of players obtained according to Rule 2.4 are scrutinised in turn for compliance with the compatibility statement (see 2.1). And,
- when pairing downward, scrutiny of proposed pairings begins with the highest numbered player; if the pairing is found not to comply with 2.1, the lower numbered player is exchanged until a compatible pairing is found; or,
 - when pairing upwards, scrutiny of proposed pairings begins with the lowest numbered player; if the pairing is found not to comply with 2.1, the higher numbered player is exchanged until a compatible pairing is found.
- 4.2 In the following example of a score-group with six players, and pairing downward, the attempt is first made to find a compatible opponent for Player #1, the highest numbered player in the score-group.

Six players in a score-group with proposed pairings as follows:

1 v 4

2 v 5

3 v 6

If the pairing 1 v 4 is not compatible, for example, because the players had met in an earlier round, the positions of Player #4 and Player #5 are exchanged so that we have:

1 v 5

2 v 4

3 v 6

If the pairing 1 v 5 is also not compatible, a further exchange is made. The original proposed pairing and possible exchanges made to find a compatible opponent for Player #1 are as follows:

Proposed Pairing (col. 1) and Possible exchanges to find compatible opponent for #1

1 v 4 1 v 5 1 v 6 1 v 3 1 v 2

2 v 5 2 v 4 2 v 4 2 v 5 3 v 5

3 v 6 3 v 6 3 v 5 4 v 6 4 v 6

- 4.3 After a compatible opponent, for example, #6, has been found for Player #1, the proposed pairing for Player #2 is scrutinised. Exchanges to find a compatible opponent for Player #2 are as follows:

Proposed Pairing (col. 1) and Possible exchanges to find compatible opponent for #2

1 v 6 1 v 6 1 v 6 1 v 3 1 v 2

2 v 4 2 v 5 2 v 3 2 v 6 3 v 5

3 v 5 3 v 4 4 v 5 4 v 5 4 v 6

- 4.4 The exchanges to find a compatible opponent for Player #2 must at the same time leave Player #1 with a compatible opponent. If this cannot be done, for example, if Player #1 and Player #2 have previously played each other and all the other players except Player #6, then the original pairing of Player #1 with Player #6 is retained and Player #2 is floated. And,
- if the score-group originally had uneven members and the lowest numbered player was floated to make even the number of players in the score-group, #2 is exchanged with the floater, originally #7 in the score-group, or,
 - if the score-group was originally even, then the lowest numbered player remaining must be floated in company with #2 to maintain an even number of members in the score-group.

5. Colour allocation rules

- 5.1 Where possible, and by means of exchanges, each player shall be given the alternate colour; at the end of each even-numbered round each player shall have had an equal number of whites and blacks. Moreover,
- no player shall be given the same colour in three successive rounds, and
 - no player shall be given three more of one colour than the other.
- 5.2 After the first scrutiny and exchanges necessary to establish that all pairings in a score-group are new pairings, a second scrutiny with exchanges where necessary is undertaken to give each player, if possible, the alternating colour and at the same time, the equalising colour.
- 5.3 If one of the players in a pairing had the same colour in the previous two rounds, he must be given the alternating colour. If both players had the same colour in the previous two rounds and compatible opponents in the score-group are not available, then one or both

players must be floated.

- 5.4 If both players in a pairing had the same colour in the previous round, then the colours they had in earlier rounds, going back in sequence, shall decide who is given the alternate colour. If players in the median score-group or above had identical histories, then the higher ranked is given the alternate colour, or, in even-numbered rounds, the equalising colour. If the players below the median score-group had identical histories, then the lower ranked player is given the alternate colour, or, in even numbered rounds, the equalising colour.
- 5.5 In the odd-numbered rounds, whenever possible, each player shall be given the colour which gives him one more only of one colour than the other.
- 5.6 In the even-numbered rounds, whenever possible, each player shall be given the colour that gives him an equal number of whites and blacks.
When both players of a pairing are due the same equalising colour, and further exchanges are not possible, the colour history will decide who is given the equalising colour, as in Rule 5.4. One player will then have two more of one colour than the other colour. This is allowed but care must be taken not to violate Rules 5.1(a) and 5.1(b), and to equalise the player's colours at the earliest opportunity.
- 5.7 (In Maxi-tournaments, an exchange of opponents to find, for example, one who is due the alternate colour is allowed only if the ratings of the opponents to be exchanged differ by 100 points or less.)

6. Exceptions applicable to the last round

- 6.1 In the last round, the general principle C.04.1.e, requiring players with the same score to be paired if they had not met in an earlier round, shall have priority over alternation and equalisation of colours, even if it is necessary for one of the players to be given the same colour for the third round in succession, or to be given three more of one colour than the other.

Brief examples of pairing

7. Pairing Round One

- 7.1 If the number of players is uneven the lowest rated player in the Pairing List is given the pairing-allocated bye.
- 7.2 The colour to be given to Player #1 is decided by drawing lots; the other odd-numbered players in the upper half of the Pairing List are then given the same colour as Player #1. Player #2 together with the other even-numbered players in the upper half of the Pairing List are given the other colour.
Depending on the draw, the pairings for the first round in a tournament of forty players would be either 1 v 21, 22 v 2, 3 v 23, 24 v 4, ... 40 v 20; or 21 v 1, 2 v 22, 23 v 3, 4 v 24 ... 20 v 40, where the player having white is mentioned first. This is the only occasion when colours need be decided by lot.
- 7.3 Players who have won their games are each awarded one point; each of those who have drawn receives 0.5 point. Each of those who have lost receives 0 point.

8. Round Two

- 8.1 The players are arranged in groups of the same score.
- 8.2 If the number of players is uneven, then the pairing-allocated bye is awarded as in Rule 1.
- 8.3 Pairing begins with the highest score-group (1 point), continues with the lowest score-group (0 point) and finishes with the Median Score-group (0.5 point).
Detailed instructions for pairing Round Two and subsequent rounds are above.

C.04.5 FIDE-approved Accelerated Systems

In Swiss tournaments with a wide range of (mostly reliable) playing strengths, the results of the first round(s) are usually quite predictable. In the first round, only a few percent of the games have a result other than "win to the stronger part". The same may happen again in round two. It can be shown that, in title tournaments, this can prevent players from achieving norms.

An accelerated pairing is a variation of Swiss pairings in which the first rounds are modified in such a way as to overcome the aforementioned weaknesses of the Swiss system, without compromising the reliability of the final rankings.

It is not appropriate to design an entirely new pairing system for acceleration, but rather design a system that works together with existing FIDE-defined pairing systems. This result is normally achieved by rearranging score brackets in some way that is not only dependent on the points that the players have scored. For instance, one of the possible methods is to add so-called "virtual points" to the score of some higher rated players (who are supposedly stronger) and henceforth build the score brackets based on the total score (real score + virtual points).

The following chapters will describe the methods that were statistically proven to accomplish the aforementioned goals. The Baku Acceleration Method is presented first, because it was the first that, through statistical analysis, was proven to be good and stable (and is also easy to explain).

Other accelerated methods may be added, as long as they can be proven, through statistical analysis, to get better results than already described methods or, if their effectiveness is comparable, to be simpler.

Unless explicitly specified otherwise, each described acceleration method is applicable to any Swiss Pairing System.

C.04.5.1 Baku Acceleration

1. Premise

In its current presentation, the Baku Acceleration Method is applicable for tournaments that last nine rounds or more, and in which the standard scoring point system (one point for a win, half point for a draw) is used.

2. Initial Groups Division

Before the first round, the list of players to be paired (properly sorted) shall be split in two groups, GA and GB.

The first group (GA) shall contain the first half of the players, rounded up to the nearest even number. The second group (GB) shall contain all the remaining players.

*Note: for instance, if there are 161 players in the tournament, the nearest even number that comprises the first half of the players (i.e. 80.5) is 82. The formula $2 * Q$ (2 times Q), where Q is the number of players divided by 4 and rounded upwards, may be helpful in computing such number - that, besides being the number of GA-players, is also the pairing number of the last GA-player.*

3. Late entries

If there are entries after the first round, those players shall be accommodated in the pairing list according to C.04.2.B/C (Initial Order/Late Entries).

The last GA-player shall be the same as in the previous round.

Note 1: In such circumstances, the pairing number of the last GA-player may be different by the one set accordingly to Rule 2.

Note 2: After the first round, GA may contain an odd number of players.

4. Virtual points

Before pairing the first three rounds, all the players in GA are assigned a number of points (called virtual points) equal to 1.

Such virtual points are reduced to 0.5 before pairing the fourth and the fifth round.

Note: Consequently, no virtual points are given to players in GB or to any player after the fifth round has been played.

5. Pairing score

The pairing score of a player (i.e. the value used to define the scoregroups and internally sort them) is given by the sum of his standings points and the virtual points assigned to him.

Appendix C.04.A

Endorsement of a software program

A.1 Introduction

To manage big Swiss tournaments, the use of computer programs, to handle players' data, pairings and results, is necessary.

To avoid misunderstandings and to support both the organisers and the arbiters, FIDE recommends the use of computer programs endorsed by FIDE itself, after a successful endorsement procedure.

A.2 The endorsement procedure for a pairing system

Each author of a program that helps to manage a chess tournament can apply for the FIDE endorsement by submitting an FE-1 form (*see Annex-1*).

For an endorsement application to be considered, the program must be able to manage Swiss tournaments using the FIDE (Dutch) System (*see C.04.3*) or any other pairing systems approved by FIDE (*see C.04.4.1-3*). The endorsement is given for the specific pairing systems (one or more).

Any program asking for endorsement should provide (explicitly or implicitly) a **FIDE mode**, which should offer all the functionalities and services required by FIDE for a tournament-managing program to be endorsable (*see below*).

The program is to be endorsed in the FIDE mode.

Moreover, it must provide the following services:

- an English language interface
- the capability to import and export files coded in the FIDE Data Exchange Format (*see A.3.1 and Annex-4*)
- the public availability of a (free) pairings checker (FPC - *see A.4*)
- the public availability of a (free) generator of simulated tournaments (RTG, *see A.5*), unless exempted by the System of Pairings and Programs Commission (SPPC)
- the possibility to be checked in a controlled environment
- the compliance with all the requirements presented in the Verification Check List (*see Annex-4*)

The applicant should consider that merely complying with all the aforementioned requirements is not enough to receive a FIDE endorsement.

The FIDE mode may also offer additional services or functionalities, provided that they are not explicitly prohibited by FIDE, on condition that those services and functionalities may not cause pairing mishaps for FIDE mode users.

If, during the period of validity of the endorsement (*see A.8*), a breach of the above conditions is reported to the SPPC, and verified by the Commission, the endorsement may be immediately suspended (pending further investigation) or permanently revoked. In the latter case, the program reverts to the status of a new program to endorse.

A.3 Data Exchange formats and files

A.3.1 FIDE Data Exchange Format

See Annex-2/TRF16 or TRF06 for the descriptions of the current FIDE Data Exchange Format (*version 2016, also called TRF16*) or the old one (*version 2006, also called TRF06*).

A.3.2 Tournament Report File (TRF)

It is a file coded in TRF16 or TRF06.

A.4 (Free) Pairings Checker (FPC)

An **External Pairings Checker** is a tool, embedded in the main program and containing the pairing engine, that can be freely used by anyone (without the user interface).

For instance, be *yourprogram.exe* the name of the program executable. It is (normally) launched by a command prompt or double-clicking on it. The regular services it offers are not relevant from the (*External Pairings*) **checker** viewpoint.

What it is expected from a **checker** is the possibility to launch *yourprogram.exe* from a command prompt with some parameters, like in:

yourprogram.exe -check FIDE_Report_File.fid

The **checker** must be able to read FIDE_Report_File.fid when coded in TRF16 and should be able to read it when coded in TRF06 (*within the limitations of such a format*). Then, for each round, the **checker** must rebuild the tournament, pair the round using the embedded pairing engine, and output a report describing which pairings are or are not consistent with those produced by the pairing engine.

A.5 Random Tournament Generator (RTG)

The RTG is a freely available tool that, preferably run from a command prompt, can easily generate many simulated tournaments producing a full TRF (TRF16) file for each of them.

In all those tournaments, the pairing rules implemented by the pairing engine must be strictly followed. It is recommended that the games results may somewhat respect the probabilities given by the FIDE rating table (*see pairings.fide.com -Documents section-, for suggestions on how to code such a probability table*).

A.6 The first endorsement procedure for a pairing system

A subcommittee of four people must be named by the SPPC at the first Congress that follows the application for the endorsement of a program, as long as such naming activity is inserted into the SPPC agenda. The subcommittee shall report to the next Congress whether the program is suitable to be endorsed.

A.7 Endorsement for pairings systems when other programs have already been endorsed for the same pairing system

As the verification of the pairing engine can be performed by computerized methods, and all the tools needed for such verification are freely available to the authors, the endorsement request can reach the SPP secretariat at any moment, as long as this is at least four months before the Congress to which it would be presented.

As, by definition, an external RTG is available, it will be used to generate 5000 random tournaments. Such tournaments will be given in input to the candidate FPC and each discrepancy, as long as there are at most 10 of them, will be collected.

Such discrepancies may depend on either:

- an error in the input file (i.e. they are the responsibility of the endorsed program which provided the RTG) *[or]*
- an error coming from the candidate *[or]*
- an interpretation divergence caused by unclear rules

Errors of the first type must be redirected to the RTG provider. Problems of the third type are redirected to the SPPC, which should issue a statement describing the proper interpretation, and then fix the problems in the successive revision of the rules. Errors of the second type must be corrected in a reasonable time-frame before the candidate is presented to the Congress for endorsement.

If the candidate has its own RTG, the latter is used to generate 5000 random tournaments, which will be then given in input to one (or more) of the available FPC(s). The analysis of the discrepancies is conducted in the same way as above.

A.8 SPPC Evolution Plan

A.8.1 Endorsement Cycle

It is a four-year period running from January 1st of Year_{X+1} to December 31st of Year_{X+4}, where X is a leap year (for instance 2016, 2020, ...).

Any endorsement given during the first three years of the Endorsement Cycle will last until the end of the Endorsement Cycle.

No endorsement is given during the last year of the Endorsement Cycle, unless the SPPC decides otherwise. FE-1 applications can only be presented for the following Endorsement Cycle.

A.8.2 Transition Period

It is a time-period lasting from January 1st of Year_{X+1} (i.e. the year of the beginning of the Endorsement Cycle) to the Congress of the same year.

It is the period during which the SPPC shall run the endorsement procedures of the programs that either were already endorsed or are presented for endorsement before the end of the previous Endorsement Cycle (i.e. December 31st of Year_X).

A.8.3 Interim Certificate

Any program that passes the endorsement procedure during the Transition Period receives an *interim certificate*, which will allow the program to be immediately used with FIDE approval.

A list of the interim certified programs will be available on *pairings.fide.com* for the whole Transition Period.

The ensuing Congress will then transform such certificate in an official endorsement, unless a formal complaint against the software is brought to the attention of the SPPC before the Congress itself.

A.8.4 List of FIDE endorsed programs (see also Annex 3)

The official endorsement of a program is decided at the Congress that follows the presentation of the proper application.

Any program that is officially endorsed is inserted into a list of endorsed programs. Such list is an annex to this section and, consequently, is part of the FIDE Handbook.

An endorsed program shall be removed from the above list if it fails to pass the endorsement procedure run during the Transition Period, and the ensuing Congress (i.e. the Congress of Year_{X+1}) acknowledges the failure.

A.8.5 Rule Amendments

If there is any variation or major clarification of the pairing rules, the SPPC shall define such changes at last for the Congress of Year_{X+3}.

This kind of changes normally comes into force on July 1st of Year_{X+5}. However (*see rule A.8.3*) interim certified programs may already use the amended rules as soon as they are endorsed during the Transition Period of Year_{X+5}.

During the Transition Period, if there is a theoretical possibility for a conflict, the tournament directors shall communicate to the players which version of the rules they are going to use in the tournament.

A.9 Currently endorsed programs

See Annex-3, containing the list of the endorsed programs and useful information related to them.

A.10 Section annexes

Annex-1	Application for Swiss Pairing Program FIDE Endorsement	FE-1
Annex-2	Tournament Report File Format (version 2006)	TRF06
	Tournament Report File Format (version 2016)	TRF16
Annex-3	List of FIDE Endorsed Programs	FEP16
Annex-4	Verification check-list	VCL17