

# FIDE Technical Commission

## Activities in the 2019 year

1. TEC started the year 2019 to look once again and fulfil all decisions taken during the 2018 TEC Meeting in Batumi GEO.
2. Agenda of the next TEC Meeting in Bucharest was prepared a long time before to discuss the actual matters with all members of the Commission. The most of them took part in discussion regarding many different aspects of TEC and made a lot of interesting proposals. The conclusion of the very fruitful discussion were mentioned it in our Reports.
3. The TEC with the help of Romanian Chess Federation organised the Meeting in Bucharest (April 27-28, 2019) and discussed directly many matters. Full discussion were presented in our Reports. The main decisions:
  - 3.1. Interruption the round or the tournament in the case of force majeure. Recommendations for arbiters and Organisers.
    - 3.1.1. Interrupted games with the possibility to sign the secret move or even without the possibility, if it possible should be continue even after long break and even players checked positions in computers. TEC express the opinion, that continuing interrupted games, even after a long break, is always preferable to any other solution. Of course, if it is possible to seal a move and/or prevent the players from accessing computer programs during the break, this should be done. There are no doubts that the arbiters and organisers during the break should try to eliminate possibility of contact players with computers and other persons.
    - 3.1.2. If necessary arbiter is allowed to change the rate of play (it means he can reduce time) to finish the started games with the different time control. Vide, e.g. the tie-breaks of the World Championship Match and in the World Cup. If necessary, it is allowed to play more than 12 hours per day to finish the interrupted games and to reach the foreseen number of rounds.
  - 3.2. TEC proposed two kinds of FIDE equipments. Official FIDE equipment and Approved equipment.
    - 3.2.1. Official FIDE equipment (clocks, boards, electronic score sheets, live telecast equipment, etc) means that the producer can put FIDE logo on the clocks and boards etc., but has to sign the contract with FIDE.

Official FIDE equipment should be used obligatory in the following events: the Olympiads, the World and Continental Team and Individual Championships open and women, World Cups and World Junior Championship.
    - 3.2.2. Approved (endorsed) equipment (but without FIDE Logo) can be used in the World and Continental seniors, youth and school

championships as well in all other World and Continental competitions, rated tournament etc.

**4. Testing the new electronic clocks.**

TEC nominated three testers to test the following electronic clocks  
LEAP KK9909 and JS-224A CHESS CLOCK

Both producers sent the required amount to FIDE, and testers presented the positive reports regarding both electronic clocks. The TEC prepared the final report and sent to FIDE.

**5. Clono Electronic Scoresheet**

The TEC explained the FIDE requirements regarding the Electronic scoresheets to the producers of the Clono Electronic Scoresheet from The Norwegian Chess Federation. They made the new Electronic Scoresheet, that will be demonstrated and discussed during the next meeting of TEC.

**6. Changes in the TEC Chapter in the FIDE Handbook – see attached the new version.**

All proposed changes and corrections were immediately introduced in the Technical Chapter in the FIDE Handbook as follows:

**6.1.** TEC introduced the new testing procedure regarding the electronic chess clocks, including all actual rates of play and changes in the FIDE Laws ie. in Rapid and Blitz play, as when both flags have fallen, the game is drawn. If a player does not notice the flag fall of his opponent's clock, his clock will also display zero and the game is drawn. If both flags fall down can you see which fell first

**6.2.** TEC decided to add the Cumulative system (Sum of Progressive Scores) to the tie-break systems using player's results.

**6.3.** New definition (explanation) of AROC and AROC Cut 1

The FIDE Technical Commission created a good team composed of chairman, secretary and three councillors. All mentioned persons have permanent contact during last year and discuss all actual matters and exchanged the point of a view in all technical aspects mentioned by the FIDE and other FIDE Commissions.

The TEC has no troubles to cooperate with all others members of the Commission and many times got proposals and remarks from all members of TEC.

We think, that two meetings of the TEC (one in the period April - June and second during the FIDE Congress) are sufficient for a proper work of Commission.

**Chairman**  
**Bharat Singh**

**Secretary**  
**Andrzej Filipowicz**

# **FIDE** Handbook

## **C. General Rules and Technical Recommendations for Tournaments**

### **02. Standards of Chess Equipment, venue for FIDE Tournaments, rate of play and tie-break regulations**

Approved by the 2018 FIDE General Assembly taking effect from 1 July 2019

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## **Introduction**

This document defines the general standards for chess equipment and conditions of play, rate of play and tie-break regulations to be used in FIDE competitions.

### **1. Chess Equipment**

**1.1** The chess equipment offered by the organisers (hosts) of a FIDE or Continental Championship, Olympiad and other FIDE registered tournaments shall conform with the standards mentioned below, and shall be approved by the Chief Organiser and the Chief Arbiter.

**1.1.1.** It is recommended, that the chess pieces, boards and clocks, used in the World or Continental top level competitions be approved by participating players. Their approval shall be obtained for other equipment the table, chairs etc. In case either side disagrees, the equipment to be used shall be decided by the Chief Organiser or the Chief Arbiter of the event, bearing in mind the standards for its size and form as mentioned below.

**1.1.2.** It is highly recommended that the chess equipment used in a competition is the same for all participants and all games.

### **2. Chess Pieces**

#### **2.1. Material**

Chess pieces should be made of wood, plastic or an imitation of these materials.

#### **2.2. Height, weight, proportions**

The size of the pieces should be proportionate to their height and form; other elements such as stability, aesthetic considerations etc., may also be taken into account. The weight of the pieces should be suitable for comfortable moving and stability.

Recommended height of the pieces is as follows: King – 9.5 cm, Queen – 8.5 cm, Bishop – 7 cm, Knight – 6 cm, Rook – 5.5 cm and Pawn – 5 cm. The diameter of the piece's base should measure 40-50% of its height. These dimensions may differ up to 10% from the above recommendation, but the order (e.g. King is higher than Queen etc.) must be kept.

### 2.3 Form, style of pieces

Recommended for use in FIDE competitions are pieces of Staunton style. The pieces should be shaped so as to be clearly distinguishable from one another. In particular the top of the King should distinctly differ from that of the Queen. The top of the Bishop may bear a notch or be of a special colour clearly distinguishing it from that of the Pawn.

#### Examples of chess pieces:



Original Staunton chess pieces, left to right: pawn, rook, knight, bishop, queen, and king

#### A modern Staunton set, in wood



**World Chess set approved by FIDE  
for the 2013 Candidate Tournament in London**



#### 2.4. Colour of the pieces

The "black" pieces should be brown or black, or of other dark shades of these colours. The "white" pieces may be white or cream, or of other light colours. The natural colour of wood (walnut, maple, etc.) may also be used for this purpose. The pieces should not be shiny and should be pleasing to the eye.



## 2.4. The initial position of the pieces – see FIDE Laws of Chess art. 2



## 3. Chess boards

### 3.1. Material and colour

For the World or Continental top level competitions wooden boards should be used. For other FIDE registered tournaments boards made of wood, plastic or card are recommended. In all cases boards should be rigid. The board may also be of stone or marble with appropriate light and dark colours, provided the Chess Organiser and Chief Arbiter find it acceptable. Natural wood with sufficient contrast, such as birch, maple or European ash against walnut, teak, beech, etc., may also be used for boards, which must have a dull or neutral finish, never shiny. Combination of colours such as brown, green, or very light tan and white, cream, off-white ivory, buff, etc., may be used for the chess squares in addition to natural colours.



### **3.2. Size of the square and the board**

The side of the square should measure 5 to 6 cm. Referring to 2.2 the side of a square should be at least twice the diameter of a pawn's base (it means four pawns on one square). A comfortable table of suitable height may be fitted in with a chessboard. If the table and the board are separate from one another, the latter must be fastened and thus prevented from moving during play.

## **4. Chess tables**

For all official FIDE tournaments the length of the table is 110 cm (with 15% tolerance). The width is 85 cm (for each player at least 15 cm). The height of the table is 74 cm. The chairs should be comfortable for the players. Special dispensation should be given for children's events. Any noise when moving the chairs must be avoided.

## **5. Chess clocks**

**5.1.** For the FIDE World or Continental Championships and Olympiads electronic chess clocks must be used. For other FIDE registered tournaments organizers are allowed to use also mechanical chess clocks.

**5.2.** If mechanical chess clocks are used, they should have a device (a "flag") signaling precisely when the hour hand indicates full hours. The flag must be arranged so that its fall can be clearly seen, helping the arbiters and players to check time. The clock should not be reflective, as that may make it difficult to see. It should run as silently as possible in order not to disturb the players during play.

**5.3.** The same type of clocks should be used throughout the tournament.

### **5.4. Requirements for electronic chess clocks**

**5.4.1.** In approved clocks, when one clock reaches zero in an increment mode time control, the other clock does not run further and retains its last display. For Rapid and Blitz tournaments, when one of the clocks reaches zero, the other clock may be set to continue to run until it also reaches zero.

**5.4.2.** In approved clocks, when both flags fall down must be seen which flag fell first.

**5.4.3.** When the approved clocks are used, the player whose flag falls first has a disadvantage and the other player, who has some time left on his clock, has a definite advantage. This is a disparity to the players.

**5.4.3.1.** Clocks must function in full accordance with the FIDE laws of chess.

- 5.4.3.2. The display at all times should show the time available to complete a player's next move (preferable to display seconds also from beginning).
- 5.4.3.3. The displays must be legible from a distance of at least 3 meters.
- 5.4.3.4. From at least a distance of 10 meter a player must have a clearly visible indication which clock is running.
- 5.4.3.5. In the case of a time control being passed, a sign on the display must signal clearly which player passed the time control first.
- 5.4.3.6. For battery powered clocks, a low-battery indication is required.
- 5.4.3.7. In case of a low-battery indication the clock must continue to function flawless for at least 10 hours.
- 5.4.3.8. Special attention should be given to the correct announcement of passing time controls.
- 5.4.3.9. In case of accumulative or delay timing systems, the clock should not add any additional time if a player passed the last time control.
- 5.4.3.10. In case of time penalties it must be possible that time and move counter corrections are executed by an arbiter within 60 seconds.
- 5.4.3.11. It must be impossible to erase or change the data in display with a simple manipulation.
- 5.4.3.12. Clocks must have a brief user manual on the clock.
- 5.4.3.13. All official time control (actual rate of play) should be mentioned in the procedure of testing clocks.
- 5.4.3.14. Electronic chess clocks used for FIDE events must be endorsed by the FIDE Technical Commission.

#### **5.4. The electronic chess clocks endorsed by the FIDE**

- 5.5.1. DGT XL (year 2007)
- 5.5.2. DGT 2010 (year 2010)
- 5.5.3. Silver Timer (year 2007)
- 5.5.4. Sistemco (year 2009)
- 5.5.5. DGT 3000 (year 2014)
- 5.5.6. CE clock (2017)
- 5.5.7. LEAP clock KK 9908 (2017)

## **6. Electronic score sheets**

### **6.1. General remarks**

- 6.1.1. An electronic score sheet is a replacement for the current used paper versions within tournaments and matches. It makes it easier for reconstructing games for publication in situations where no other means of move registration is used.

- 6.1.2.** An electronic score sheet is a device where a player can notate his and his opponent's moves during a game with an electronic registration of the game played.
- 6.1.3.** Basic rules for this electronic score sheet (device):
  - 6.1.3.1.** The device is dedicated for notating chess games (not a multipurpose computer).
  - 6.1.3.2.** The device fully complies with FIDE rules.
  - 6.1.3.3.** The game notation complies with FIDE Laws of Chess, whereas the use of figurines is allowed.
  - 6.1.3.4.** The device can be linked to the owner or player through some unique identification of the device.
  - 6.1.3.5.** The device logs user actions during game mode to prevent or detect foul play.
  - 6.1.3.6.** It is foreseen that both players and tournament organizations will buy and use their own devices.
  - 6.1.3.7.** The device should have approximately the size of A5-A6 (paper size).

## **6.2. Game mode**

- 6.2.1.** This is the mode where the player notates his game. The switch from any other mode to game mode can be made by the player himself when the game is finished or by the tournament organization or arbiter.
- 6.2.2.** The following rules apply to the electronic score sheet in game mode:
  - 6.2.2.1.** During the game it is not possible to switch to any other mode.
  - 6.2.2.2.** The game notation is clearly visible for the arbiter, with the restriction that not all moves need to be visible.
  - 6.2.2.3.** The state of the device being in game mode is clearly visible for everyone.
  - 6.2.2.4.** It is not allowed to go out of game mode by accident or deliberately, without notifying this to the player, his opponent or arbiter. This is also clearly visible to all parties.
  - 6.2.2.5.** If the battery has low power this must be signaled. When this is signaled, the battery must hold out at least 8 hours to make it possible to notate a complete game.
  - 6.2.2.6.** A minimum of 7 moves must be visible in a move list.
  - 6.2.2.7.** Graphical input through a chess board with figurines is allowed.
  - 6.2.2.8.** Scrolling through the move list is allowed, as is correcting of incorrect entered moves.
  - 6.2.2.9.** A game finishes when a result is noted and both players signed the score sheet. The arbiter signature is optional.
  - 6.2.2.10.** The players are obliged to submit the text of their game to the Organizer with reference to article 8.3 of the Laws of Chess.
  - 6.2.2.11.** On entering moves:

- It is allowed to enter an illegal move;
- It is allowed to enter the clock time, draw offers and other abbreviation according to Laws of chess. Input of clock times should be possible using a figurine notation;
- It is allowed to enter only moves of white or black during time trouble;
- It is allowed to enter a dash for a move during time trouble;
- The device is not allowed to correct or signaling illegal moves automatically;
- If a stalemate or checkmate is missed or an illegal move is made by the player, the device must be able to record following moves.
- An automatic move counter should be available

**6.2.2.12.** The device must be able to restart the notation.

### **6.3. Arbiter mode**

**6.3.1.** The arbiter mode is an optional mode for the device. This mode is created to give the arbiter some extra features supporting his job.

**6.3.2.** If there is an arbiter mode available the following rules apply:

**6.3.2.1.** Only the arbiter (or a representative of the tournament organization) is allowed to enter this mode during a game.

**6.3.2.2.** In this mode legality checks may be done on the moves played in the game:

- Threefold repetition of a position (fivefold repetition)
- 50 moves rule (75 moves rule)
- Detection of stalemate or checkmate.
- The arbiter can take moves back in case an illegal move is detected.

### **6.4. Owner mode**

**6.4.1.** The owner mode is an optional mode for the device. This is a mode where the producer may add some chess features for creating an attractive product for their customers.

**6.4.2.** If there is owner mode available the following rules apply:

**6.4.2.1.** The identification of the owner shall be possible in owner's mode.

**6.4.2.2.** This mode is only allowed when not playing a game. Otherwise it is completely locked out.

**6.4.2.3.** No chess program is allowed i.e. this is not a chess computer.

**6.4.2.4.** No other then chess related activities are allowed.

**6.4.2.5.** For anybody it is easy to see that the device is in owner mode.

## **7. Testing Clocks and equipment**

- 7.1.** The FIDE Technical Commission is competent to decide whether or not any piece of equipment is suitable for use in FIDE competitions. The Commission may recommend the use of other types of chess sets in addition to those mentioned above. It may make a list of equipment with satisfactory standards, the specimen of which would be kept at the FIDE Secretariat.
- 7.2.** If necessary FIDE will determine the general conditions for other equipment needed in chess competitions, such as score sheets, demonstration boards, etc.

### **7.3. Test report of electronic chess clocks**

- 7.3.1.** Name of the clock
- 7.3.2.** Name of tester
- 7.3.3.** Period of testing
- 7.3.4.** Is it possible to read the information on the displays at 3 meter distance from the clock?
- 7.3.5.** Did you make test under normal tournament conditions with at least five players?
- 7.3.6.** Is it clearly visible which player is to move, from all sides of the clock?
- 7.3.7.** Did you make test 7.3.6 under normal tournament conditions with at least five players?
- 7.3.8.** Is there any sound given by the clock during or at the end of game?
- 7.3.9.** Is the clock speed equal with the normal time?
- 7.3.10.** Is there a low battery indication?
- 7.3.11.** If yes in 7.3.10 is this indication shown immediately after the clock is set up?
- 7.3.12.** Is it possible to change or delete indications of the clocks by default?
- 7.3.13.** Is there a short manual on the clock?
- 7.3.14.** Is the clock stable during use, especially when players are short on time?
- 7.3.15.** Did you make test 7.3.14 under normal tournament conditions with at least five players?
- 7.3.16.** Are the buttons used by the players sturdy enough?
- 7.3.17.** Did you make test 7.3.16 under normal tournament conditions with at least five players?
- 7.3.18.** If both flags fall down can you see which fell first?
- 7.3.19.** Does the clock stop working after a flag fall in the last period?
- 7.3.20.** Did you have problems to correct the time shown by the display or to give penalties?
- 7.3.21.** Did you have problems to change the move counter?

- 7.3.22.** Are the following rate of play available as default modes:
- a) 40 moves in 100 minutes + 20 moves in 50 minutes + 15 minutes and 30 second per move from move 1
  - b) 40 moves in 90 minutes + 30 minutes with an increment of 30 seconds per move from move 1
  - c) Game 90 minutes +30 second per move from move 1
  - d) 40 moves in 2 hours + 20 moves in 1 hour + 15 minutes and 30 seconds per move from 61 move
  - e) 40 moves in 2 hours + 20 moves in 1 hour + 30 minutes
  - f) 40 moves in 2 hours + 30 minutes
  - g) Game 60 minutes
  - h) 40 moves in 2 hours + 1 hour
  - j) Rapid G-15 minutes + 10 seconds per move
  - k) Rapid G-15 minutes + 5 seconds per move
  - l) Rapid G-25 minutes + 10 seconds per move
  - m) Rapid G-25 minutes
  - n) Blitz 5 minutes
  - o) Blitz 5 minutes + 3 seconds per move
  - p) Blitz 3 minutes + 2 seconds per move
- 7.3.23.** Is the incremental time when using Fisher mode added before the first move?
- 7.3.24.** Do you have some additional remarks to some questions? If yes, add them below.
- 7.3.25.** What is your recommendation on endorsement?

## **8. Tournament halls for the FIDE World or Continental Championships and Olympiads**

### **8.1. Inspection and preparation of the Playing Hall**

- 8.1.1.** All areas to which players have access during play should be inspected carefully and repeatedly by the Chief Organiser and the Chief Arbiter.
- 8.1.2.** Space for spectators must be prepared. The distance between the chess boards and the spectators should be not less than one meter, for top level tournaments 1.5 meters.
- 8.1.3.** Lighting of a standard similar to that used for examinations should be about 800 lux. Lighting should not cast shadows or cause pinpoints of light to be reflected from the pieces. Beware of direct sunlight, especially if this varies during play. For a high-level tournaments the organizer should have the possibility (the device) to adjust the light in the hall – quality of lighting covering a larger area to the same level of flux requires a greater number of lumens.
- 8.1.4.** It is highly recommended that the hall be carpeted. The noise made by moving chairs must be avoided.

8.1.5. The extraneous noise levels close to the tournament hall must be checked too.

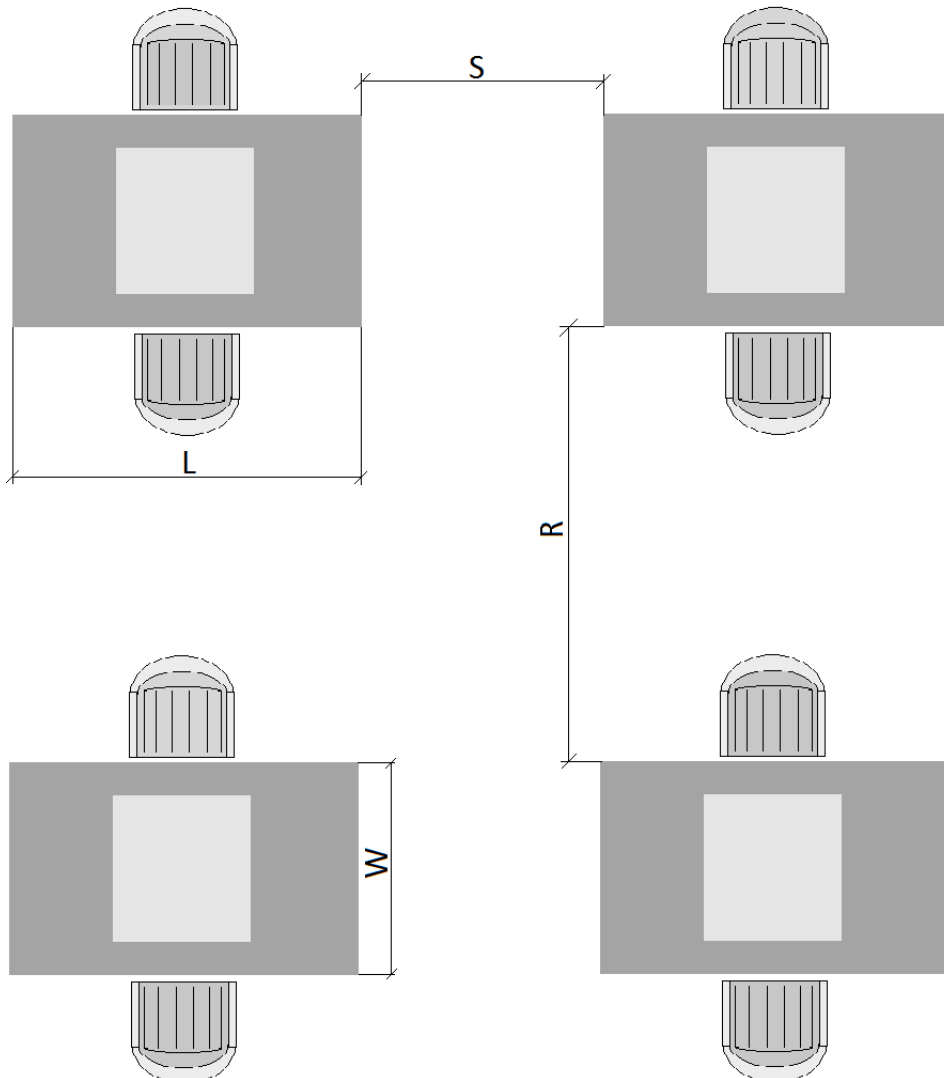
## 8.2. Space for players and arbiters

8.2.1. It is recommended that the minimal space of 4 square meters be available for each player in individual matches and round robin tournaments. For other tournaments 2 square meters may be adequate. **(Please refer to Diagram-A)**

### Diagram A

Some definitions and recommendations regarding sizes

- L : Length of the table.  
L = 110 cm, tolerances: +20 cm, -10 cm.
- W : Width of the table.  
W = 85 cm, tolerances: +5 cm, -5 cm.
- S : Horizontal space between table rows.  
S = 3m, tolerances: +1.5 m, -0.5 m.
- R : Vertical space between table rows.  
R = 3m, tolerances: +1.5 m, -0.5 m.



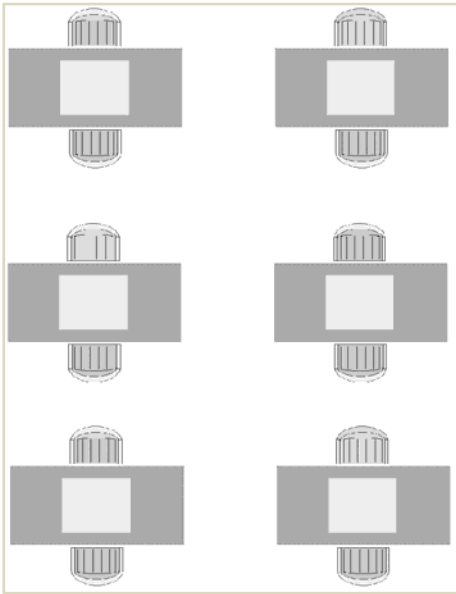
**8.2.2.** There should be a minimum of 2.5 meters between rows of players. It is best not to have long, unbroken rows. Where possible, players should play on individual tables at least for top boards or top matches in the events. **(Please refer to Diagram-B)**

### Diagram B

#### Basic tournament hall placement styles

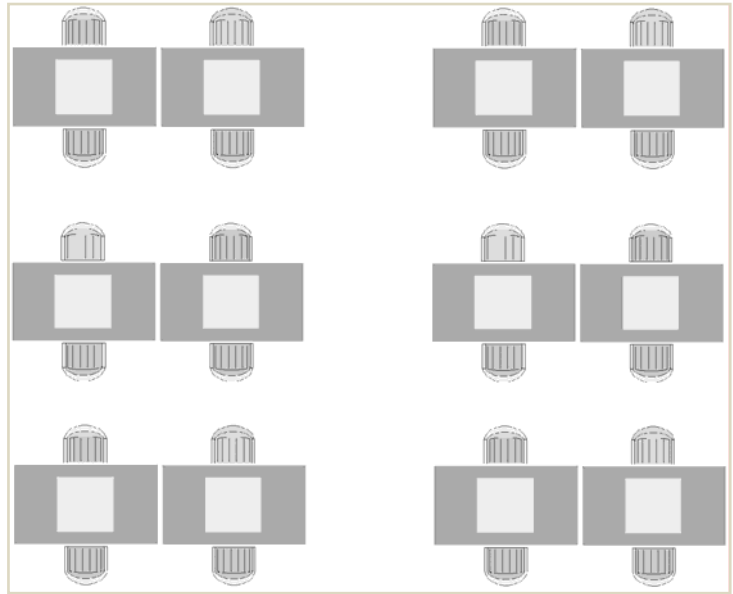
##### Single Row

Preferable style for individual competitions



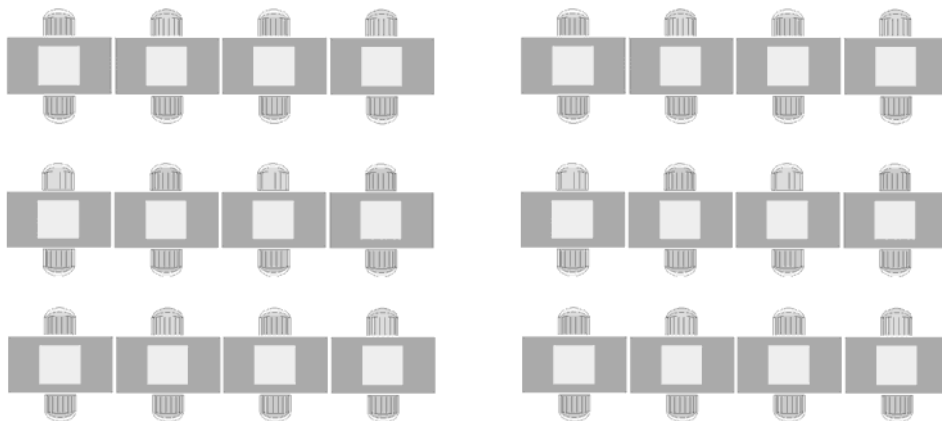
##### Dual Row

For large events (open tournaments, youth champ. etc)  
An arbiter may check two tables in the same time



##### Multi Row

For team competitions (should be avoided for individual events  
as much as possible)





- 8.2.3. Special tables with the connection to the Internet for arbiters should be arranged too.
- 8.2.4. Games should not be placed too close to doors.
- 8.2.5. Playing conditions for all players in the event (especially for both players in a game) should be equalled as much as possible. Exceptions are mentioned in (b).

## **9. Broadcasting**

- 9.1. All official FIDE events must be broadcast on the Internet
  - 9.1.1. All games from World Championship Matches, World Cup, Olympiad, World Team Championship and GP FIDE.
  - 9.1.2. At least 10 games from each age category of World Youth and Cadet Championships.
  - 9.1.3. As many games as possible from all other championships, but at least 30 games.
  - 9.1.4. Delay of broadcasting should be decided by the Chief Organiser and Chief Arbiter.

## **10. Requirements on treatment of disabled chess players**

### **10.1. General remarks**

- 10.1.1. These guidelines will be used for all FIDE rated events.
- 10.1.2. No one has the right to refuse to meet a disabled player against whom he has been correctly paired.
- 10.1.3. All chess venues must either be accessible to all, or an acceptable alternative venue with full supervision shall be available to those who cannot access the nominated venue.
- 10.1.4. A circular shall be sent out when all competitors are known. This circular contains an entry form with the usual points and questions, asking whether any potential competitor has an impairment that will require special circumstances. The competitor has to inform the organisers about the special circumstances at least 20 days before the start of the event.
- 10.1.5. No disabled player shall be "penalised" in accordance with the Articles 6.7 and 8.1.6 of the Laws of Chess because of disability.
- 10.1.6. It is recommended, that in all events there should be a tournament physician. The Chief Organiser and the Chief Arbiter shall know the phone number of the local hospital and physician.
- 10.1.7. It is recommended that each national chess federation appoints an officer for matters regarding disabilities.
- 10.1.8. It is strongly recommended that all organisers of chess events adopt these guidelines.

### **10.2. Special arrangements for participants**

- 10.2.1. Any impaired competitor who reasonably requests in time the

placing of their equipment in a particular seat or orientation, has the right to do so, provided that this does not disadvantage his opponent or other competitors. The event organizer has to ensure that the needs of both players are catered for.

- 10.2.2.** All relevant information shall be displayed before the start of the event, including maps of the venue showing the location of toilets, refreshments and emergency exits.
- 10.2.3.** If a competitor cannot access the refreshments, arrangements should be made for their needs to be met.
- 10.2.4.** If a competitor cannot press his own clock or move his own pieces, an assistant shall be available unless the opponent is willing to do so. If the opponent is acting as an assistant the Chief Arbiter may decide to give him extra thinking time.
- 10.2.5.** If a player has made a prior request, copies of all notices should be available in large print. If a player is unable to read large print, then the notices must be read to him.
- 10.2.6.** It is recommended that all team events have the rule that if a visiting team indicates that it has a player with an impairment coming with them, giving sufficient notice, that the home team does everything which is reasonable to ensure that that player can participate.

### **10.3. Organisation of the tournament hall**

- 10.3.1.** Only one game per table: in case an assistant is needed the tables should be larger (2 m width in order to place the assistants for the disabled) and should be placed separately.
- 10.3.2.** The corridors between rows of tables should be twice as large (wheel chairs)
- 10.3.3.** The arbiters should be clearly accessible to all players.
- 10.3.4.** Foresee additional contact points for electricity: some visually disabled players use a lamp for their chess board. This lamp should not disturb the opponent.
- 10.3.5.** Put the blind chess players at the same place as much as possible (they will know the way to the rest room and back in very short time!) and give them the same assistant during the whole tournament.

### **10.4. Assistants**

- 10.4.1.** The assistants should have a minimum knowledge of chess; the language is less important since most of the handicapped players only speak their mother tongue.
- 10.4.2.** Assistants for blind players should know the name of the pieces in their language
- 10.4.3.** Assistants for blind players should inform the player when they are leaving the chess board temporarily.
- 10.4.4.** The assistant should always write the moves: this is an important help for the arbiter.

## **10.5. Tournament organisation and Chief Arbiter**

- 10.5.1.** Organise a players meeting for all players before the first round, preferably in the tournament hall.
- 10.5.2.** If possible only one round per day should be played.
- 10.5.3.** After making the pairings the chief arbiter should decide manually on which board everyone should play: some players (visually handicapped) should always play at the same board whereas the largest space should be foreseen for wheelchair players.
- 10.5.4.** Draw proposals or claims can easily go via the assistant. All players push the clock themselves, except the players who are physically unable to do so.
- 10.5.5.** In the case there is a time trouble situation with visually disabled players the arbiter should bear in mind that the (not visually disabled) opponent can reply almost immediately. The tournament regulations should therefore release the visually disabled player from the obligation to record the moves during the last five minutes, even when the game is played with an increment of at least 30 seconds. The visually handicapped player should then update his scoresheet after the time trouble.

## **11. Requirements on treatment of school tournaments**

### **11.1. General remarks**

- 11.1.1.** These guidelines shall be observed for all school tournaments played under FIDE auspices or that are to be FIDE rated and ideally should also be followed by national and regional school tournaments, especially those that may be nationally rated.  
These guidelines may also be useful indications for ordinary school chess which is often described as "non-competitive" (games are usually played without clocks and not usually notated) in cases where the organizer is trying to introduce players to the world of "competitive" chess.
- 11.1.2.** Every player should have the accompanying person who will be an attendant.
- 11.1.3.** The attendant may help the player to find the table.
- 11.1.4.** During a game all attendants, parents, coaches are treating as spectators. They should stay in place for spectators and cannot interfere with a game in progress. In case of questionable situation may contact only the arbiter or the organizer.
- 11.1.5.** Attendants can't use any mobile phone or electronic device in the playing hall.
- 11.1.6.** Using cameras with flash is restricted to the first five minutes of each round.

### **11.2. Organisers and their duties**

- 11.2.1.** Organisers are obliged to prepare the invitation and the regulation, that shall be as comprehensive as possible, stating clearly the expected conditions and giving all details which may be of use to the participants:
- name, address (including e-mail, fax and telephone numbers) of the organizers,
  - date and venue of the event,
  - the hotel(s) where the players are to stay (including e-mail and telephone numbers), also regarding provided the board and lodging,
  - requirements for the participants (e.g. registration date),
  - tournament schedule (with the annotation of players confirmation, approximate game-time and estimated time of awards ceremony),
  - the rate of play and tie-break system,
  - the default-time,
  - the prizes, gifts, diploma and important diploma for the participation.
- 11.2.2.** The chief organiser should be present in the playing hall during the tournament. He is responsible for preparing the playing hall, opening ceremony and awards ceremony.
- 11.2.3.** It is recommended to insure one arbiter for every 30 players.
- 11.2.4.** Before the first round the organiser is obliged to explain to players the tournament regulations and the remind some basic rules:
- finding the table (numbered), chessboard and the proper color of the pieces,
  - announce that players who lose their game play the next round (unless the rules of a competition specify otherwise),
  - touch move rule,
  - castling (the first king, later rook, using one hand),
  - using the chess clock (start and stop),
  - illegal move and it's consequence,
  - mobile phone and it's consequence,
  - the way of claiming (stop the clock and ask the arbiter),
  - the way of announcing the result.
  - announce, that the arbiter will collect the result at the table of player. He will also check the names of the players before writing the result.

**Note:** Some children run to their parents very fast and forget to report the result. Sometimes they give false results when coming to the arbiters place or they change the color. After that the arbiter has less time to intervene or check who won the game.

### 11.3. Tournament conditions

- 11.3.1.** If it is possible, all of the games should be played in one playing hall, e.g. in the school gym. The minimal space of two square meters should be available for each player.
- 11.3.2.** In other cases each playing hall should have at least one arbiter.
- 11.3.3.** The tables and chairs should be adjusted to the children's height and to the chessboard size. An example see below [dimension in cm].

Size no	0	1	2	3	4	5	6	7
Color	white	orange	purple	yellow	red	green	blue	brown
Height (without shoes)	80-95	93-116	108-121	119-142	133-159	146-176	159-188	174-207
Popliteal height	20-25	25-28	28-31	31-35	35-40	40-43	43-48	48+
Seat height	21	26	31	35	38	43	46	51
Table height	40	46	53	59	64	71	76	82
Average age	5-6 years		7-12 years			13-15 years		

- 11.3.4.** It is highly recommended that the chess equipment used in a competition is the same for all participants and all games.
- 11.3.5.** Chess pieces should be made of wood, plastic or an imitation of these materials.
- 11.3.6.** Pieces for FIDE Tournaments should be used. If the organizer has difficulties to prepare this kind of equipment, he can use the chessboard with the minimum square size of 55 mm and king's height 90 mm (Staunton no 5). The chessboard with the square size 38 mm and king's height 75 mm (Staunton no 4) is also acceptable in the school tournaments.
- 11.3.7.** It is necessary to prepare additional chess sets, pieces and chess clocks because they not once are damaged during a school tournaments.
- 11.3.8.** Each chessboard should have coordinates.
- 11.3.9.** The playing hall should be good marked with the sign indicating the playing area, the spectators area, arbiters and organizers tables as well as rest rooms etc.
- 11.3.10.** If players are taking part in a few groups, it is recommended to indicate the name of the group using different colors and other characters. The same color can be used for marking the pairings, results etc. It is easier for children to remember colors and find the right group.
- 11.3.11.** Space for spectators must be prepared and clearly marked. It can be another room or the separated place in the playing hall. The distance between the chessboards and the spectators should not be less than one meter. The rope barrier is requested.

- 11.3.12. It is not allowed for the spectators to walk between the chess-board or stay vis-à-vis a supporting player.
- 11.3.13. Players become spectators when their game finishes. Players are not allowed to play skittles games in the playing hall.
- 11.3.14. The advertising board should be prepared to display the start lists, pairings, results and other tournament information.
- 11.3.15. No food or drink, except for bottled water, will be permitted in the competition area. Bottled water cannot be placed on the table.

#### **11.4. Rate of play and results**

- 11.4.1. There must be no more than 5-6 hours play for all rounds in one day. Examples: one day 6 round G=15' and 5 rounds G-30' or three days with two rounds G-60'. It could be connected with the possibility of achieving the local chess category.
- 11.4.2. Tournaments without chess clocks. After 20 minutes the arbiters give the clock to the players with e.g. 5 minutes for each player to complete the game.
- 11.4.3. Player who wins his game, or wins by forfeit, scores one point (1), a player who loses his game, or forfeits, scores no points (0), and a player who draws his game scores a half point ( $\frac{1}{2}$ ).

#### **11.5. Tie-break system**

- 11.5.1. The tie-break system shall be decided in advance and announced prior to the start of the tournament. The arbiter should be ready to clearly clarify the calculations rules of tie-break system to the children and spectators. If all tie-breaks fail, the tie shall be broken by drawing of lots.
- 11.5.2. A play-off is the best system, but it is not always appropriate, because it required the additional time. However It is recommended that play-offs be arranged in the case of the first place in the championship or qualifying places.

#### **11.5.3. The tie-break in Swiss Tournaments:**

- 11.5.3.1. The Buchholz Cut 1 (the sum of the scores of each of the opponents of a player reduced by the lowest score of the opponent)
- 11.5.3.2. The Buchholz System (the sum of the scores of each of the opponents of a player)
  - 11.3.2.1. The greater number of wins.
  - 11.3.2.2. The greater number of wins with Black (unplayed games shall be counted as played with White).

#### **11.5.4. The tie-break in Round-Robin Tournaments:**

- 11.5.4.1. The greater number of wins.
- 11.5.4.2. Sonneborn-Berger (the sum of the scores of the opponents a player has defeated and half the scores of the players with whom he has drawn).

**11.5.4.3.** Koya System (the number of points achieved against all opponents who have achieved 50 % or more)

**11.5.4.4.** The greater number of wins with Black (unplayed games shall be counted as played with White)

## 12. Rate of play - time controls

The following time controls are approved for FIDE World Events:

No	EVENT	TIME CONTROL
1	World Championship Match	100'/40+50'/20+15'/end
		with incr. 30"/move, starting from move 1
2	Candidates Tournament	100'/40+50'/20+15'/end
		with incr. 30"/move, starting from move 1
3	World Cup	90'/40+30'/end
		with incr. 30"/move, starting from move 1
4	Grand Prix	100'/40+50'/20+15'/end
		with incr. 30"/move, starting from move 1
5	Women's World Championship Match	90'/40+30'/end
		with incr. 30"/move, starting from move 1
6	Chess Olympiad	90'/40+30'/end
		with incr. 30"/move, starting from move 1
7	World Team Championship	90'/40+30'/end
		with incr. 30"/move, starting from move 1
8	Women's World Team Championship	90'/40+30'/end
		with incr. 30"/move, starting from move 1
9	Women's Grand Prix	90'/40+30'/end
		with incr. 30"/move, starting from move 1
10	World Senior Championship	90'/40+30'/end
		with incr. 30"/move, starting from move 1
11	World Senior Team Championship	90'/40+30'/end
		with incr. 30"/move, starting from move 1
12	World Juniors and Girls U-20 Championship	90'/40+30'/end
		with incr. 30"/move, starting from move 1
13	Continental Individual Championships	90'/40+30'/end
		with incr. 30"/move, starting from move 1
14	Continental Team Championships	90'/40+30'/end
		with incr. 30"/move, starting from move 1
15	World Youth 14-16-18 Championships	90'/40+30'/end
		with incr. 30"/move, starting from move 1
16	World Cadets 08-10-12 Championships	90'/40+30'/end
		with incr. 30"/move, starting from move 1
17	World Schools Individual Championships	90'/40+30'/end
		with incr. 30"/move, starting from move 1
18	World Schools Team Championships	90'/40+30'/end
		with incr. 30"/move, starting from move 1
19	World Amateur Championship	90'/40+30'/end
		with incr. 30"/move, starting from move 1
20	World Olympiad U-16	90'/40+30'/end
		with incr. 30"/move, starting from move 1
21	World Rapid Championships	15' with incr. 10" per move, starting from move 1
22	World Blitz Championships	3' with incr. 2" per move, starting from move 1

**Remarks:**

**A. The rate of play for the title tournaments**

– see International Title Regulations (Qualification Commission)

**B. The rate of play for the rated tournaments**

- see FIDE Rating Regulations (Qualification Commission)

## **13. Tie-break regulations**

### **13.1. Choice of Tie-Break System**

**13.1.1.** The choice of the tie-break system to be used in a tournament shall be decided in advance and shall be announced prior to the start of the tournament. If all tie-breaks fail, the tie shall be broken by drawing of lots.

**13.1.2.** A play-off is the best system, but it is not always appropriate. For example, there may not be adequate time.

**13.1.3.** The list of all other commonly used tie-break systems is given in alphabetical order. The players shall be ranked in descending order of the respective system.

### **13.2. Play-Off**

**13.2.1.** Adequate time must be set aside for a conclusion to be reached.

**13.2.2.** The pairing system and rate of play must be determined in advance of the start of the event.

**13.2.3.** All eventualities must be covered in the regulations.

**13.2.4.** It is recommended that play-offs only be arranged for disposition of the first place, a championship or qualifying places.

**13.2.5.** Where subsidiary places are also being decided during the play-off, each position shall be determined in accordance with the play-off. For example, three players tie: number 1 wins the play-off, number 2 comes second and number 3 third. Number 2 shall receive the second prize.

**13.2.6.** Where two players are tied after the first place has been decided, they shall split any prize money to which they are entitled. For example: four players tie, and a knockout is arranged. Players 3 and 4 knocked out in the semi-final shall share the 3rd and 4th prizes equally.

**13.2.7.** Where time is limited before a closing ceremony, games between players potentially involved in such ties in the last round may be scheduled to commence earlier than other games in the tournament.

**13.2.8.** If there is a play-off it shall commence after a break of at least 30 minutes after the conclusion of the last main game involving players in the play-off. Where there are further stages, there shall be a break of at least 10 minutes between each stage.



- 13.2.9.** Each game shall be supervised by an arbiter. If there is a dispute, the matter shall be referred to the Chief Arbiter. His decision shall be final.
- 13.2.10.** Initial colours shall be determined by lot in all cases below.
- 13.2.11.** The following is an example where time for play-off is somewhat limited.
- (1) If two players have to play a tie-break match, they play a two-game mini-match at the rate of all the moves in 3 minutes with 2 seconds added on for each move from move 1. If this match is tied, a new drawing of lots for colours shall take place. The winner shall be the first winner of a game. After each odd-numbered game the colours shall be reversed.
  - (2) If three players have to take part in a play-off, they play a one-game round robin at the rate P-3'+2". If all three players again tie, then the next tie-break shall be used (see the list of tie-breaks), and the lowest-placed player eliminated. The procedure is then as in (1).
  - (3) If four players have to take part in a play-off they play a knockout. The pairings shall be determined by lot. There shall be two-game elimination matches at the rate as in (1).
  - (4) If five or more players have to take part in a play-off, they are ranked by the next tie-break (the list of tie-breaks) and all but the top four are eliminated.
- 13.2.12.** The right is reserved to make necessary changes.
- 13.2.13.** Where only two players are involved in the play-off, they may play at a slower rate of play, if time permits, by agreement with the CA and CO.

### **13.3. Average Rating of Opponents AROC**

- 13.3.1.** The Average Rating of Opponents (ARO) is the sum of the ratings of the opponents of a player, divided by the number of games played.
- 13.3.2.** The Average Rating of Opponents Cut (AROC) is the Average Rating of Opponents, excluding one or more of the ratings of the opponents, starting from the lowest-rated opponent. All forfeits and byes are to be cut from the calculation of AROC.
- 13.3.3. Average Rating of Opponents Cut 1 (AROC 1)**  
The Average Rating of Opponents Cut 1 (AROC 1) is the Average Rating of Opponents, excluding the lowest-rated opponent.
- 13.3.3.1.** All forfeits and byes are to be cut from the calculation of AROC 1. If a player has one or more forfeits or byes, then no additional results are to be cut from the calculation of AROC 1.

#### **13.4. Buchholz System**

- 13.4.1.** The Buchholz System is the sum of the scores of each of the opponents of a player.
- 13.4.2.** The Median Buchholz is the Buchholz reduced by the highest and the lowest scores of the opponents.
- 13.4.3.** The Median Buchholz 2 is the Buchholz score reduced by the two highest and the two lowest scores of the opponents.
- 13.4.4.** The Buchholz Cut 1 is the Buchholz score reduced by the lowest score of the opponents.
- 13.4.5.** The Buchholz Cut 2 is the Buchholz score reduced by the two lowest scores of the opponents.

#### **13.5. Direct Encounter**

If all the tied players have met each other, the sum of points from these encounters is used. The player with the highest score is ranked number 1 and so on.

#### **13.6. Koya System for Round-Robin Tournaments**

- 13.6.1.** This is the number of points achieved against all opponents who have achieved 50% or more (including wins by forfeit).
- 13.6.2.** The Koya System Extended  
The Koya system may be extended, step by step, to include score groups with less than 50% (including wins by forfeit), or reduced, step by step, to exclude players who scored 50% (including wins by forfeit) and then higher scores.

#### **13.7. Number of Games won with the Black Pieces**

#### **13.8. Number of Games played with the Black Pieces**

The greater number of games played with the black pieces (unplayed games shall be counted as played with the white pieces).

#### **13.9. Sonneborn-Berger System (calculation)**

- 13.9.1.** Sonneborn-Berger for Round Robin Individual Tournaments is the sum of the scores of the opponents a player has defeated (including wins by forfeit) and half the scores of the players with whom he has drawn.
- 13.9.2.** Sonneborn-Berger for Double Round Robin Individual Tournaments is the sum of the products of the scores in two games (including wins by forfeit) against the opponent multiplied by the number of points achieved by this opponent.

**13.9.3.** Sonneborn-Berger for Team Tournaments is the sum of the products of the scores made by each opposing team and the score made against that team. Example: In Chess Olympiads the sum of Sonneborn-Berger points is calculated as follows: match points of each opponent, excluding the opponent who scored the lowest number of match points, multiplied by the number of game points achieved against this opponent.

### **13.10. Cumulative system**

#### **13.10.1. Sum of Progressive Scores**

After each round a player has a certain tournament score. These scores are added to determine the total Sum of Progressive Score.

#### **13.10.2. Sum of Progressive Score Cuts**

The Sum of Progressive Score reduced by the tournament score of one or more rounds, starting with the first round.

### **13.11. Tie-Break in Team Competitions**

**13.11.1.** Match points in team competitions that are decided by game points.

**For example:** 2 points for a won match where a team has scored more points than the opposing team, 1 point for a drawn match and 0 points for a lost match.

**13.11.2.** Game points in team competitions that are decided by match points. The tie is broken by determining the total number of game points scored.

### **13.12. Tie-Break Systems using both the Player's and the Opponents' Results**

**13.12.1.** Sonneborn-Berger,

**13.12.2.** The Koya System for Round-Robin Tournaments,

**13.12.3.** The Koya System Extended,

**13.12.4.** Number of games won (including wins by forfeit),

**13.12.5.** Number of games won with the Black Pieces,

**13.12.6.** Direct encounter.

### **13.13. Tie-Break Systems using a Team's Own Results**

**13.13.1.** Match points in team competitions.

**13.13.2.** Game points in team competitions that are decided by match points. The tie is broken by determining the total number of game points scored.

**13.13.3.** Direct encounter.

### **13.14. Tie-Break Systems using the Opponent's Results**

**13.14.1.** Note that these scores are determined in each case after the application of the rule concerning unplayed games.

### **13.14.2. Buchholz System**

- (2.1) Median Buchholz.
- (2.2) Median Buchholz 2.
- (2.3) Buchholz Cut 1.
- (2.4) Buchholz Cut 2.
- (2.5) Sum of Buchholz: the sum of the Buchholz scores of the opponents.

### **13.14.3. Sonneborn-Berger System**

- (3.1) Sonneborn-Berger for Individual Tournaments
- (3.2) Sonneborn-Berger for Team Tournaments A: the sum of the products of the match points made by each opposing team and the match points made against that team, or
- (3.3) Sonneborn-Berger for Team Tournaments B: the sum of the products of the match points made by each opposing team and the game points made against that team, or
- (3.4) Sonneborn-Berger for Team Tournaments C: the sum of the products of the game points made by each opposing team and the match points made against that team, or
- (3.5) Sonneborn-Berger for Team Tournaments D: the sum of the products of the game points made by each opposing team and the game points made against that team.
- (3.6) Sonneborn-Berger for Team Tournaments Cut 1 A: the sum of the products of the match points made by each opposing team and the match points made against that team, excluding the opposing team who scored the lowest number of match points, or
- (3.7) Sonneborn-Berger for Team Tournaments Cut 1 B: the sum of the products of the match points made by each opposing team and the game points made against that team, excluding the opposing team who scored the lowest number of match points, or
- (3.8) Sonneborn-Berger for Team Tournaments Cut 1 C: the sum of the products of the game points made by each opposing team and the match points made against that team, excluding the opposing team who scored the lowest number of game points, or
- (3.9) Sonneborn-Berger for Team Tournaments Cut 1 D: the sum of the products of the game points made by each opposing team and the game points made against that team, excluding the opposing team who scored the lowest number of game points.

### **13.15. Tie-Break Systems using Ratings in Individual 5 (where all the players are rated)**

**13.15.1.** When a player has elected not to play more than two games in a tournament, his ARO or AROC shall be considered to be lower than that of any player who has completed more of the schedule.

(1.1) ARO - See 13.3.1.

(1.2) AROC - See 13.3.2.

**13.15.2.** For tie-break purposes a player who has no opponent will be considered as having played against a virtual opponent who has the same number of points at the beginning of the round and who draws in all the following rounds. For the round itself the result by forfeit will be considered as a normal result.

This gives the formula:

$$\mathbf{Svon} = \mathbf{SPR} + (1 - \mathbf{SfPR}) + 0.5 * (\mathbf{n} - \mathbf{R})$$

where for player P who did not play in round R:

**n** = number of completed rounds

**Svon** = score of virtual opponent after round n

**SPR** = score of P before round R

**SfPR** = forfeit score of P in round R

#### **Example 1:**

in Round 3 of a nine-round tournament Player P did not show up.

Player P's score after 2 rounds is 1.5. The score of his virtual opponent is

$$\mathbf{Svon} = 1.5 + (1 - 0) + 0.5 * (3 - 3) = 2.5 \text{ after round 3}$$

$$\mathbf{Svon} = 1.5 + (1 - 0) + 0.5 * (9 - 3) = 5.5 \text{ at the end of the tournament}$$

#### **Example 2:**

in Round 6 of a nine-round tournament player P's opponent does not show up.

Player P's score after 5 rounds is 3.5. The score of his virtual opponent is:

$$\mathbf{Svon} = 3.5 + (1 - 1) + 0.5 * (6 - 6) = 3.5 \text{ after round 6}$$

$$\mathbf{Svon} = 3.5 + (1 - 1) + 0.5 * (9 - 6) = 5.0 \text{ at the end of the tournament}$$

**13.15.3.** For tie-break purposes all unplayed games in which players are indirectly involved (results by forfeit of opponents) are considered to have been drawn"

### **13.16. Recommended Tie-Break Systems**

**13.16.1.** For different types of tournaments the Tie-Break Rules are as listed below **and are recommended to be applied in the listed order.**

**13.16.2. Individual Round-Robin Tournaments:**

Direct encounter

The greater number of wins, including forfeits

Sonneborn-Berger

Koya System

**13.16.3. Team Round-Robin Tournaments:**

Match points (if ranking is decided by game points) or

Game points (if ranking is decided by match points)

Direct encounter

Sonneborn-Berger

**13.16.4. Individual Swiss Tournaments where not all the ratings are consistent:**

Buchholz Cut 1

Buchholz

Sonneborn-Berger

**Cumulative system - Sum of Progressive Scores**

Direct encounter

The greater number of wins including forfeits

The greater number of wins with Black pieces

**13.16.5. Individual Swiss Tournaments where all the ratings are consistent:**

Buchholz Cut 1

Buchholz

Direct encounter

AROC

The greater number of wins including forfeits

The greater number of wins with Black pieces

The greater number of games with Black (unplayed games shall be counted as played with White)

Sonneborn-Berger

**13.16.6. Team Swiss Tournaments:**

Match points (if ranking is decided by game points), or

Game points (if ranking is decided by match points)

Direct encounter

Buchholz Cut 1

Buchholz

Sonneborn-Berger

## **13.17. Details of Berger table**

### **13.17.1. Berger Tables for Round-Robin Tournaments**

Where there are an odd number of players, the highest number counts as a bye.

#### **3 or 4 players:**

**Rd 1:** 1-4, 2-3. **Rd 2:** 4-3, 1-2. **Rd 3:** 2-4, 3-1.

#### **5 or 6 players:**

**Rd 1:** 1-6, 2-5, 3-4. **Rd 2:** 6-4, 5-3, 1-2. **Rd 3:** 2-6, 3-1, 4-5.

**Rd 4:** 6-5, 1-4, 2-3. **Rd 5:** 3-6, 4-2, 5-1.

#### **7 or 8 players:**

**Rd 1:** 1-8, 2-7, 3-6, 4-5. **Rd 2:** 8-5, 6-4, 7-3, 1-2.

**Rd 3:** 2-8, 3-1, 4-7, 5-6. **Rd 4:** 8-6, 7-5, 1-4, 2-3.

**Rd 5:** 3-8, 4-2, 5-1, 6-7. **Rd 6:** 8-7, 1-6, 2-5, 3-4.

**Rd 7:** 4-8, 5-3, 6-2, 7-1.

#### **9 or 10 players:**

**Rd 1:** 1-10, 2-9, 3-8, 4-7, 5-6.

**Rd 2:** 10-6, 7-5, 8-4, 9-3, 1-2.

**Rd 3:** 2-10, 3-1, 4-9, 5-8, 6-7.

**Rd 4:** 10-7, 8-6, 9-5, 1-4, 2-3.

**Rd 5:** 3-10, 4-2, 5-1, 6-9, 7-8.

**Rd 6:** 10-8, 9-7, 1-6, 2-5, 3-4.

**Rd 7:** 4-10, 5-3, 6-2, 7-1, 8-9.

**Rd 8:** 10-9, 1-8, 2-7, 3-6, 4-5.

**Rd 9:** 5-10, 6-4, 7-3, 8-2, 9-1.

#### **11 or 12 players:**

**Rd 1:** 1-12, 2-11, 3-10, 4-9, 5-8, 6-7.

**Rd 2:** 12-7, 8-6, 9-5, 10-4, 11-3, 1-2.

**Rd 3:** 2-12, 3-1, 4-11, 5-10, 6-9, 7-8.

**Rd 4:** 12-8, 9-7, 10-6, 11-5, 1-4, 2-3.

**Rd 5:** 3-12, 4-2, 5-1, 6-11, 7-10, 8-9.

**Rd 6:** 12-9, 10-8, 11-7, 1-6, 2-5, 3-4.

**Rd 7:** 4-12, 5-3, 6-2, 7-1, 8-11, 9-10.

**Rd 8:** 12-10, 11-9, 1-8, 2-7, 3-6, 4-5.

**Rd 9:** 5-12, 6-4, 7-3, 8-2, 9-1, 10-11.

**Rd 10:** 12-11, 1-10, 2-9, 3-8, 4-7, 5-6.

**Rd 11:** 6-12, 7-5, 8-4, 9-3, 10-2, 11-1.

**13 or 14 players:**

- Rd 1:** 1-14, 2-13, 3-12, 4-11, 5-10, 6-9, 7-8.  
**Rd 2:** 14-8, 9-7, 10-6, 11-5, 12-4, 13-3, 1-2.  
**Rd 3:** 2-14, 3-1, 4-13, 5-12, 6-11, 7-10, 8-9.  
**Rd 4:** 14-9, 10-8, 11-7, 12-6, 13-5, 1-4, 2-3.  
**Rd 5:** 3-14, 4-2, 5-1, 6-13, 7-12, 8-11, 9-10.  
**Rd 6:** 14-10, 11-9, 12-8, 13-7, 1-6, 2-5, 3-4.  
**Rd 7:** 4-14, 5-3, 6-2, 7-1, 8-13, 9-12, 10-11.  
**Rd 8:** 14-11, 12-10, 13-9, 1-8, 2-7, 3-6, 4-5.  
**Rd 9:** 5-14, 6-4, 7-3, 8-2, 9-1, 10-13, 11-12.  
**Rd 10:** 14-12, 13-11, 1-10, 2-9, 3-8, 4-7, 5-6.  
**Rd 11:** 6-14, 7-5, 8-4, 9-3, 10-2, 11-1, 12-13.  
**Rd 12:** 14-13, 1-12, 2-11, 3-10, 4-9, 5-8, 6-7.  
**Rd 13:** 7-14, 8-6, 9-5, 10-4, 11-3, 12-2, 13-1.

**15 or 16 players:**

- Rd 1:** 1-16, 2-15, 3-14, 4-13, 5-12, 6-11, 7-10, 8-9.  
**Rd 2:** 16-9, 10-8, 11-7, 12-6, 13-5, 14-4, 15-3, 1-2.  
**Rd 3:** 2-16, 3-1, 4-15, 5-14, 6-13, 7-12, 8-11, 9-10.  
**Rd 4:** 16-10, 11-9, 12-8, 13-7, 14-6, 15-5, 1-4, 2-3.  
**Rd 5:** 3-16, 4-2, 5-1, 6-15, 7-14, 8-13, 9-12, 10-11.  
**Rd 6:** 16-11, 12-10, 13-8, 14-8, 15-7, 1-6, 2-5, 3-4.  
**Rd 7:** 4-16, 5-3, 6-2, 7-1, 8-15, 9-14, 10-13, 11-12.  
**Rd 8:** 16-12, 13-11, 14-10, 15-9, 1-8, 2-7, 3-6, 4-5.  
**Rd 9:** 5-16, 6-4, 7-3, 8-2, 9-1, 10-15, 11-14, 12-13.  
**Rd 10:** 16-13, 15-11, 14-12, 1-10, 2-9, 3-8, 4-7, 5-6.  
**Rd 11:** 6-16, 7-5, 8-4, 9-3, 10-2, 11-1, 12-15, 13-14.  
**Rd 12:** 16-14, 15-13, 1-12, 2-11, 3-10, 4-9, 5-8, 6-7.  
**Rd 13:** 7-16, 8-6, 9-5, 10-4, 11-3, 12-2, 13-1, 14-15.  
**Rd 14:** 16-15, 1-14, 2-13, 3-12, 4-11, 5-10, 6-9, 7-8.  
**Rd 15:** 8-16, 9-7, 10-6, 11-5, 12-4, 13-3, 14-2, 15-1.

**13.17.2.** For a double-round tournament it is recommended to reverse the order of the last two rounds of the first cycle. This is to avoid three consecutive games with the same colour.

**13.18. Details of Varma tables**

**13.18.1.** Directions for "restricted" drawing of tournament numbers:

**13.18.1.1.** The arbiter should prepare, beforehand, unmarked envelopes each containing one of the sets of numbers A, B, C and D as indicated below in point 5. These envelopes are then respectively placed in larger envelopes, on each of which the quantity of player-numbers contained in the small envelopes is indicated.

**13.18.1.2.** The order in which players draw lots is determined beforehand as follows: The players from the federation with the greatest



number of representatives shall draw first. Where two or more federations have the same number of representatives, precedence is determined by the alphabetical order of the FIDE country code. Among players of the same federation, precedence is determined by the alphabetical order of their names.

**13.18.1.3.** For example, the first player of the federation with the largest number of players shall choose one of the large envelopes containing at least enough numbers for his contingent, and then draw one of the numbers from this envelope. The other players from the same contingent shall also draw their numbers from the same envelope. The numbers that remain are available for use by other players.

**13.18.1.4.** The players of the next contingent then choose an envelope, and this procedure is repeated until all players have drawn their numbers.

**13.18.1.5.** The following Varma Table can be used for 9 to 24 players:

- **9/10 players:** A: (3, 4, 8); B: (5, 7, 9); C: (1, 6); D: (2, 10)
- **11/12 players:** A: (3, 4, 5, 10, 11); (4, 5, 9, 10, 11); B: (4, 5, 9, 10); C: (1, 2, 7); D: (6, 8, 12); E: (3, 11)
- **13/14 players:** A: (4, 5, 6, 11, 12); B: (1, 2, 8, 9); C: (7, 10, 13); D: (3, 14)
- **15/16 players:** A: (5, 6, 7, 12, 13, 14); B: (1, 2, 3, 9, 10); C: (8, 11, 15); D: (4, 16)
- **17/18 players:** A: (5, 6, 7, 8, 14, 15, 16); B: (1, 2, 3, 10, 11, 12); C: (9, 13, 17); D: (4, 18)
- **19/20 players:** A: (6, 7, 8, 9, 15, 16, 17, 18); B: (1, 2, 3, 11, 12, 13, 14); C: (5, 10, 19); D: (4, 20)
- **21/22 players:** A: (6, 7, 8, 9, 10, 17, 18, 19, 20); B: (1, 2, 3, 4, 12, 13, 14, 15); C: (11, 16, 21); D: (5, 22)
- **23/24 players:** A: (6, 7, 8, 9, 10, 11, 19, 20, 21, 22); B: (1, 2, 3, 4, 13, 14, 15, 16, 17); C: (12, 18, 23); D: (5, 24)