FIDE Rating Regulations

Approved by the 1982 General Assembly, amended by the General Assemblies of 1984 through 2004.

0.0 Introduction

The basic data for measurement of chess performances must be broad and ample. Play will be rated by FIDE when it takes place in a FIDE registered competition and meets all the following requirements.

- 0.1 The following regulations shall be altered by the General Assembly upon recommendation of the Qualification Commission.
 - 0.11 Any such changes shall come into effect on 1st July of the year following the decision by the General Assembly. For tournaments, such changes will apply to those starting on or after that date.
- 0.2 In principle, all important events should be rated. All top level tournaments may be rated by FIDE even if no rating report is submitted by the federation of the territory in which the event is held. (GA '96)

1.0 Rate of Play:

- 1.1 For a game to be rated each player must have the following minimum periods in which to complete all the moves, assuming the game lasts 60 moves. (PB 2000)
- 1.11 Where at least one of the players in the tournament has a rating 2200 or higher, each player must have a minimum of 120 minutes.
- 1.12 Where at least one of the players in the tournament has a rating 1600 or higher, each player must have a minimum of 90 minutes.
- 1.13 Where all the players in the tournament are rated below 1600, each player must have a minimum of 60 minutes.
- 1.14 Examples of ways in which 1.11 can be achieved include:

All the moves in two hours.

40 moves in 75 minutes, followed by all the moves in 15 minutes but each time a player makes a move an extra 30 seconds is added to his clock time.

40 moves in 90 minutes, followed by all the moves in 30 minutes.

- 1.2 Games played with all the moves at a rate faster than the above are excluded from the list.
- 1.3 Where a certain number of moves is specified in the first time control, it is recommended to be 40 moves. Players benefit from uniformity here.

2.0 Laws to be followed:

- 2.1 Play must take place according to the FIDE Laws of Chess.
- 2.2 Smoking is banned in FIDE-rated events. Smoking is not permitted in the playing hall for the duration of the tournament. This applies to everyone present players, officials, media representatives and spectators.

A separate area outside the playing area must be provided where smoking is permitted. This should be easily accessible from the playing hall. If local ordinances totally prohibit smoking on the premises, the players and officials must be provided with easy access outdoors.

3.0 Number of rounds per day:

3.1 No more than three rounds per day and a total playing time of no more than 12 hours. (GA '95)

4.0 Duration of the event:

- 4.1 A period not greater than 90 days.
 - 4.11 Leagues may be rated which last for a period greater than 90 days.

5.0 Unplayed games

5.1 Whether these occur because of forfeiture or any other reason, they are not counted.

6.0 Composition of the tournament

6.1 If an unrated player scores zero or half in his first event, his score and that of his opponents against him are disregarded. (GA 2004).

- 6.2 The results in events involving preliminaries and finals or play-offs are pooled.
- 6.3 In a round robin tournament at least one-third of the players must be rated.
 - 6.31 If the event has less than 10 players, at least 4 must be rated.
 - 6.32 In a double round tournament with unrated participants, there must be at least 6 players, 4 of whom must be rated.
 - 6.33 National Championships played as round robins shall be rated if at least 3 men (or 2 women in events exclusively for women) participants had official FIDE Ratings before the beginning of the tournament.
- 6.4 In a Swiss or team event (except Scheveningen matches), only the games against rated opponents are counted. Scheveningen tournaments/matches in which more than one unrated player participates will not be rated. (GA 2002)
 - 6.41 For rated players, all games against rated opponents are counted.
 - 6.42 For unrated players, results are only counted if the player meets at least three rated opponents in the event. (GA 2002)
 - 6.43 In the case of a round robin tournament where one or more games are unplayed, the results of the tournament are to be reported for rating as for a Swiss system tournament.
- 6.5 Where a match is over a specific number of games, those played after one player has won shall not be rated. (GA 2000)

7.0 Registration of events to be rated

7.1 As in B.03. Events not pre-registered will not be rated. (GA 2000)

8.0 Submission of reports

8.1 As in B.01 article 1.9

9.0 Official FIDE Rating List:

9.1 The Qualification Commission shall prepare a list four times a year which incorporates the rated play during the rating period into the previous list. This shall be done using the rating system formula based on the percentage expectancy curve and derived from the normal distribution function of statistical and probability theory. (GA `99)

- 9.11 The list published 1.1 is used for events commencing 1.1-31.3. The list published 1.4 is used for events commencing 1.4-30.6. The list published 1.7 is used for events commencing 1.7-30.9 The list published 1.10 is used for events commencing 1.10-31.12.
- 9.12 The following data concerning each player:
 - 9.12 a The name of each player whose rating exceeds 1600 as of the current date for the list.

FIDE title, Federation, Current Rating, ID Number, Number of games rated in the rating period and birthday.

The current value of k for the player and over how many games this has been played when k = 25 (see 10.52).

- 9.13 The closing dates for receipt of information for a particular list are usually one month before the publication of that list.
 - 9.13a Rated play completed or received after the closing date will not normally be included in computation for the rating list in question.
- 9.14 A rating for a player new to the list shall be published only if it meets the following criteria:
 - 9.1.4a If based on results obtained under 6.3., a minimum of 9 games.
 - 9.1.4b If based on results obtained under 6.4., a minimum of 9 games played against rated opponents.
 - 9.1.4c The condition of 9 games need not be met in one tournament: results from other events, played within the same or next 7 rating periods, are pooled to obtain the initial rating.
 - 9.14d If based on results obtained in the Olympiad, a Continental Team Championship or World Team Championship, a minimum of 7 games. (GA 2004)
 - 9.14e If a player is a member of the IBCA, ICSC or IPCA, a minimum of 7 games. (GA 2004)

- 9.2 Players who are not to be included on the list:
 - 9.21 Players whose ratings drop below 1601 are listed on the next list as 'delisted'. Thereafter they are treated in the same manner as any other unrated player.
 - 9.22 Unrated titled players are published in a separate list concurrently with the list of rated titled players.
- 9.23 Inactive players are not included on the list but nonetheless are considered rated at their most recent published rating for rating and title result purposes.
 - 9.2.3a Players are considered to commence inactivity if they play fewer than 4 rated games in a one year period.
 - 9.2.3b Inactive players are shown on the next 7 rating lists after starting being considered inactive. Their names are then flagged as inactive in the alphabetical section of the rating list and removed from the national federation's lists which would contain only the list of active players (GA '98).
 - 9.2.3c A player regains his activity if he plays at least 4 rated games in a one year period and he is then listed on the next list.
 - 9.2.3d For the purposes of the FIDE rating list ranking of top players, a player who is inactive over a 12 month period of inactivity on the rating list will no longer appear on the top list.
- 9.3 The Qualification Commission shall move to monthly rating lists on 1 July of the year following a decision to do so by the Presidential Board. The above regulations shall be amended as follows:
- 9.31 The list published on the 1st of the month shall be effective between the first and the last day of that month.
- 9.32 The name of each player whose rating exceeds 1600 shall be published.
- 9.33 The closing date for receipt for information will normally be the end of the month, 30 days before the next list.
- 9.34 Players whose rating drops below 1601 will be listed in the next list as 'delisted'. Thereafter they will be treated in the same manner as any other unrated player.

10.0 The working of the FIDE Rating System

The FIDE Rating system is a numerical system in which percentage scores are converted to rating differences and vice versa. Its function is to produce scientific measurement information of the best statistical quality.

- 10.1 The rating scale is an arbitrary one with a class interval set at 200 points. The tables that follow show the conversion of percentage score 'p' into rating difference 'd_p'. For a zero or 100% score dp is necessarily indeterminate. The second table shows conversion of difference in rating 'D' into scoring probability 'P_D' for the higher 'H' and the lower 'L' rated player respectively. Thus the two tables are effectively mirror-images.
 - (a) The table of conversion from percentage score, p, into rating differences, d_p

р	dp	р	dp	р	dp	р	dp	р	dp	р	dp
1.0		.83	273	.66	117	.49	-7	.32	-133	.15	-296
.99	677	.82	262	.65	110	.48	-14	.31	-141	.14	-309
.98	589	.81	251	.64	102	.47	-21	.30	-149	.13	-322
.97	538	.80	240	.63	95	.46	-29	.29	-158	.12	-336
.96	501	.79	230	.62	87	.45	-36	.28	-166	.11	-351
.95	470	.78	220	.61	80	.44	-43	.27	-175	.10	-366
.94	444	.77	211	.60	72	.43	-50	.26	-184	.09	-383
.93	422	.76	202	.59	65	.42	-57	.25	-193	.08	-401
.92	401	.75	193	.58	57	.41	-65	.24	-202	.07	-422
.91	383	.74	184	.57	50	.40	-72	.23	-211	.06	-444
.90	366	.73	175	.56	43	.39	-80	.22	-220	.05	-470
.89	351	.72	166	.55	36	.38	-87	.21	-230	.04	-501
.88	336	.71	158	.54	29	.37	-95	.20	-240	.03	-538
.87	322	.70	149	.53	21	.36	-102	.19	-251	.02	-589
.86	309	.69	141	.52	14	.35	-110	.18	-262	.01	-677
.85	296	.68	133	.51	7	.34	-117	.17	-273	.00	
.84	284	.67	125	.50	0	.33	-125	.16	-284		

(b) Table of conversion of difference in rating, D, into scoring probability P_D, for the higher, H, and the lower, L, rated player respectively.

D	PD		D	P_{D}		D	P_{D}		D	P_{D}	
Rtg Dif	Н	L	Rtg Dif	Н	L	Rtg Dif	Н	L	Rtg Dif	Н	L
0-3	.50	.50	92-98	.63	.37	198-206	.76	.24	345-357	.89	.11
4-10	.51	.49	99-106	.64	.36	207-215	.77	.23	358-374	.90	.10
11-17	.52	.48	107-113	.65	.35	216-225	.78	.22	375-391	.91	.09
18-25	.53	.47	114-121	.66	.34	226-235	.79	.21	392-411	.92	.08
26-32	.54	.46	122-129	.67	.33	236-245	.80	.20	412-432	.93	.07
33-39	.55	.45	130-137	.68	.32	246-256	.81	.19	433-456	.94	.06
40-46	.56	.44	138-145	.69	.31	257-267	.82	.18	457-484	.95	.05
47-53	.57	.43	146-153	.70	.30	268-278	.83	.17	485-517	.96	.04
54-61	.58	.42	154-162	.71	.29	279-290	.84	.16	518-559	.97	.03
62-68	.59	.41	163-170	.72	.28	291-302	.85	.15	560-619	.98	.02
69-76	.60	.40	171-179	.73	.27	303-315	.86	.14	620-735	.99	.01
77-83	.61	.39	180-188	.74	.26	316-328	.87	.13	over 735	1.0	.00
84-91	.62	.38	189-197	.75	.25	329-344	.88	.12			

- 10.2 Determining the Rating ' R_u ' in a given event of a previously unrated player.
 - 10.21 If an unrated player scores less than one point in his first rated event, his score is disregarded.
 - First determine the average rating of his competition ' R_c '. (GA '94)
 - (a) In a Swiss or Team tournament: this is simply the average rating of his opponents.
 - (b) The results of both rated and unrated players in a round robin tournament are taken into account. For unrated players, the average rating of the competition $'R_c'$ is also the tournament average ' R_a ' determined as follows: (GA '94)
 - (i) Determine the average rating of the rated players 'Rar'.
 - (ii) Determine p for each of the rated players against all their opponents. Then determine dp for each of these players. Then determine the average of these dp = 'dpa'.
 - (iii) 'n' is the number of opponents.
 - $R_a = R_{ar} d_{pa} \ge n/(n+1)$
 - 10.22 If he scores 50%, then $R_u = R_c$. (GA '94)
 - 10.23 If he scores more than 50%, then $R_u=R_c+12.5$ for each half point scored over 50%. (GA '94)
 - 10.24 If he scores less than 50% in a Swiss or team tournament (GA '94):
 - $\mathbf{R}_{\mathrm{u}} = \mathbf{R}_{\mathrm{c}} + \mathbf{d}_{\mathrm{p}}.$
 - 10.25 If he scores less than 50% in a round-robin (GA '94): $R(u) = R(c) + d(p) \times n/(n+1).$
- 10.3 The Rating R_n which is to be published for a previously unrated player is then determined by taking the weighted average of all his R_u results. e.g. A player has R_u results of 2280 over 5 games, 2400 over 10 games and 2000 over 5 games:
 - $R_n = [2280 \ x \ 5 + 2400 \ x \ 10 + 2000 \ x \ 5] / 20 = 2270.$
 - 10.31 Where a player's first result(s) is less than 1601, or the FIDE rating floor at the time of the event, the result(s) is ignored. (GA 2004)
 - 10.32 R_n for the FIDE Rating list (FRL) is rounded off to the nearest 1 or zero.
 - 10.33 Only $R_n \ge 1601$, or the FIDE rating floor at the time of the event, are considered. (GA 2004)
- 10.4 If an unrated player receives a published rating before a particular tournament in which he has played is rated, then he is rated as a rated player

with his current rating, but in the rating of his opponents he is counted as an unrated player.

- 10.5 Determining the rating change for a rated player:
 - 10.51 For each game played against a rated player, determine the difference in rating between the player and his opponent, D.

A difference in rating of more than 350 points shall be counted for rating purposes as though it were a difference of 350 points (compare 10.54).

- (a) Use table B.02.10.1(b) to determine the player's score probability P_D .
- (b) $\Delta R = \text{score} P_D$. For each game, the score is 1, 0.5 or 0.
- (c) $\Sigma \Delta R \propto K$ = the Rating Change for a given tournament, or Rating period.

10.52 K is the development coefficient.

K = 25 for a player new to the rating list until he has completed events with a total of at least 30 games.

K = 15 as long as a player's rating remains under 2400.

K = 10 once a player's published rating has reached 2400, and he has also completed events with a total of at least 30 games. Thereafter it remains permanently at 10.

10.53 Rn is rounded off to the nearest 1 or 0.

10.54 Determining the ratings in a round-robin tournament.

Where unrated players take part, their ratings are determined by a process of iteration. These new ratings are then used to determine the rating change for the rated players.

What follows shows the methodology.

player	Rate	W	р	d_p	R _c	d_p	R_u	R _c (new)	R _u (new)
А	2600	8	.89	351				()	()
В	2500	7	.78	220					
С	u	7			2348		2411	2351	2414
D	2400	6	.67	125					
Е	u	6			2348		2386	2348	2386
F	2150	4	.44	-43					
G	2300	3	.33	-125					
Н	u	2			2348	-220	2150	2337	2139
Ι	u	1			2348	-351	2032	2305	1989
J	2300	1	.11	-351					

$$\begin{split} R_{ar} &= 2600 + 2500 + 2400 + 2150 + 2300 + 2300 \text{ divided by 6} \\ R_{ar} &= 2375 \\ d_{pa} &= 351 + 220 + 125 - 43 - 125 - 351 \text{ divided by 6} \\ d_{pa} &= 29.5 \\ R_{a} &= 2375 - 29.5 \text{ x } 9/10 \\ R_{a} &= 2348 \end{split}$$

$R_u = 2348 + 5 \ge 12.5$	= 2411
$R_u = 2348 + 3 \ge 12.5$	= 2386
$R_u = 2348 - 220 \ge 0.9$	= 2150
$R_u = 2348 - 351x \ 0.9$	= 2032
	$\begin{aligned} R_u &= 2348 + 5 \ x \ 12.5 \\ R_u &= 2348 + 3 \ x \ 12.5 \\ R_u &= 2348 - 220 \ x \ 0.9 \\ R_u &= 2348 - 351 \ x \ 0.9 \end{aligned}$

However, Player I is more than 350 points below players A, B, C, D, E.

Player H is more than 350 points below A.

Player C , I counts as 2061.2061-2032=29.29/9=3	Rc(new)=2351
Player E, I counts as 2036	Rc(new)=2348
Player H, A counts as 2500	Rc(new)=2337
Player I, A, B, C, D, E count as 2382	Rc(new)=2305

Then the ΔR for each of the rated players for each game is determined using R_u as if an established rating.

F was a poor choice of player for the tournament. He dragged down the average rating too much. If a player rated 2380 or higher had replaced him, C would achieve a better rating even with one point less. This is because, for unrated players with plus scores the average rating of the field is extremely important. Had I's expected score been so poor, he should not have been chosen, everybody suffered.

11.0 Reporting Procedures

- 11.1 Results should be submitted as in B.01 article 1.9.
- 11.2 The principal information to be reported for a round robin tournament is conveniently grouped in form 1. It consists of:
 - 11.21 Identification of the event, including exact dates of beginning and end.
 - 11.22 Specification of the time limit.

- 11.23 The complete cross-table. This must list the players in final rank order, together with full first names, FIDE ID numbers, titles, federation affiliation and rating. Any change from that appearing on the current FRL, such as a change in name following marriage, must be carefully annotated. For each player, his results against each opponent must be given as 1, 1/2 (or 0.5) or 0. Any result arising from an unplayed game shall be marked with "+", "-" or "=" where a full point, zero or half a point have been awarded respectively. An explanation must be given where appropriate. Any unusual circumstances in the event must also be described.
- 11.3 The principal information to be reported for a Swiss or team tournament is conveniently grouped in forms 2 and 3, attached. It consists of the material listed in 11.2. and also the colour played in a given game. A full cross-table of the event must also be included.
 - 11.31 Alternatively a computer generated table can be submitted as a rating report. This must show R_{ar} , n and W. For unrated players where n is less than 3, zero should be entered in the R_{ar} column.

A column for $W-W_e$ should also be included (i.e. the rating increment before application of K). For an unrated player who meets at least 3 rated opponents, his R_u should be given even if this is less than 1601.

A federation wishing to submit results in this form should consult the Rating Administrator beforehand so that there can be test runs of the program.

- 11.4 Results of all international competitions must be submitted for rating unless the original invitations have made it clear the event was not to be FIDE rated. The chief arbiter must also announce this to the players before the tournament starts.
- 11.5 Each national federation shall designate an official to coordinate and expedite qualification and rating matters. His name and details must be given to the FIDE Secretariat.

12.0 Monitoring the Operation of the Rating System

12.1 One of the functions of Congress is to establish the policies under which FIDE titles and ratings are awarded. The function of the rating system is to produce scientific measurement information of the best statistical quality to enable Congress to award equal titles for equal proficiencies of players.

Thus the rating system must be properly scientifically maintained and adjusted on both a short and long term basis.

- 12.2 The rating scale is arbitrary and open ended. Thus only differences in ratings have any statistical significance in terms of probability. Thus if the composition of the FIDE Rating pool were to change, the rating scale could drift with respect to the true proficiency of the players. It is a major objective to ensure the integrity of the system so that ratings of the same value from year to year represent the same proficiency of play.
- 12.3 Part of the responsibilities of the Rating System Administrator is to detect any drift in the rating scale.

13.0 The requirements for the FIDE Rating System Administrator

- 13.1 A sufficient knowledge of statistical probability theory as it applies to measurements in the physical and behavioural sciences.
- 13.2 Ability to design the surveys described under 12.3.; to interpret the results of the surveys; and to recommend to the Qualification Commission whatever measures are needed to preserve the integrity of the rating system.
- 13.3 To be able to advise and assist any FIDE member federation in the establishment of a national rating system.
- 13.4 To display a level of objectivity comparable to that of a FIDE arbiter.

14.0 Some comments on the Rating system

- 14.1 The following formula gives a close approximation to tables 10.1a/b. $P = 1/(1 + 10^{-[D/400]})$. However the tables are used as shown.
- 14.2 Tables 10.1a/b are used precisely as shown, no extrapolations are made to establish a third significant figure.
- 14.3 K is used as a stabilising influence in the system. When K = 10, the rating turns over in approximately 75 games, K = 15, 50 games, K = 25 it is 30 games.

14.4 The system has been devised to enable players to verify their ratings readily. It would be more accurate to rate each game separately as averaging assumes a linear scale. However this would be much more laborious.

15.0 Rapidplay Ratings (GA 1998)

The following principles shall govern the operation of a rapid rating system.

- (a) Players who have reached a minimum ELO of 1600 shall be rated under the rapid play rating list.
- (b) The value of the K factor shall be determined by the rating administrator.
- (c) To differentiate the ratings of rapid chess games from ratings obtained from normal chess games, the ratings from rapid games are denoted by the first 3 digits.

16.0 Inclusion in the Rating Lists.

- 16.1 To be included in the FRL or FIDE Rapidplay Rating list, a player must be a member of national chess federation which is a member of FIDE. That is, the federation must not be temporarily or permanently excluded from membership.
- 16.2 It is the responsibility of national federations to inform FIDE if players should not be included in the FRL, FRRL.
- 16.3 Any player excluded from either rating list because he is unable to obtain membership of a national federation, may apply to FIDE for special dispensation to be included.

'25.07.05'