

NZCF Rating Regulations

Note: These regulations came into operation on 1 May 1985 and incorporate amendments adopted by the Council in 1991, 1998, and 2007.

1. Administration

- 1.1 The Council has responsibility for maintaining and administering the Federation's rating system as provided in these regulations and shall appoint a Rating Officer or Rating Committee to carry out the necessary work.
- 1.2 Rating lists shall be produced three times each year as at 1st March, 1st July and 1st November, each list incorporating tournament results from the preceding four month period.

2. General Principles

- 2.1 The NZCF rating system is based on the standard probability function of statistical probability theory which relates, for any pair of rated players, their difference in rating to the probable result of encounters between them.
- 2.2 Percentage scores (P) are converted into rating differences (D_p) by the following table. For a zero or 100% score D_p is necessarily indeterminate.

P	D_p	P	D_p	P	D_p	P	D_p	P	D_p	P	D_p
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		

2.3 Rating difference (D) is converted into scoring probability (P_D) for higher (H) and lower (L) rated players according to the following table:

D			D			D			D		
P_D			P_D			P_D			P_D		
Rtg	Dif		Rtg	Dif		Rtg	Dif		Rtg	Dif	
H	L		H	L		H	L		H	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	1.00	.00
84-91	.62	.38	189-197	.75	.25	329-344	.88	.12			

2.4 The rating scale should correlate closely with the FIDE rating scale.

3. Calculation of Provisional Ratings

- 3.1 A player is regarded as provisionally rated until he has played at least 15 fully rated games, only then becoming established in the following period.
- 3.2 A provisional player's performance in a tournament is measured by $R_p = R_a + D_p$ where R_p is the performance rating, R_a is the average rating of the opponents, and D_p is the difference in rating based on the percentage score achieved and taken from the table in rule 2.2.
- 3.3 At the end of each rating period new ratings are first calculated for unrated and provisionally rated players using the performance rating formula for R_p . For this calculation all games played by the provisionally rated player, including those played in earlier rating periods, are taken into account.
- 3.4 The new ratings calculated under rule 3.3 are then used in the calculation of new ratings for players who already have established ratings.

4. Calculation of Established Ratings

- 4.1 For each established player the change in rating for each tournament is calculated by the formula $\Delta R = K(W_a - W_e)$ where ΔR is the change in rating, K is the player's coefficient, W_a is the actual game score, and W_e is the expected game score.

- 4.2 The player's coefficient (or rating point value of a game point) is determined by $K = (3000 - R_o) / 50$ where R_o is the player's rating at the beginning of the period.
- 4.3 A player's expected score is obtained by $W_e = \Sigma P_i$ where ΣP_i is the sum of the percentage expectancies against the individual opponents. A player's expected score in any one game shall not exceed the bounds 0.10 to 0.90.
- 4.4 Bonus points are awarded to a player who exceeds his expected percentage score by at least 10%. In such a case the player's coefficient (K) is multiplied by $(P_a - P_e) / 10$ where P_a is the player's actual percentage score and P_e is the expected percentage score. The maximum value of this factor is 3.
- 4.5 A player rated over 2200 cannot receive bonus points, nor may a player pass 2200 with the aid of bonus points.
- 4.6 Bonus points cannot be earned where a player plays less than four games in a tournament.
- 4.7 No tournament winner shall lose rating points for that tournament.
- 4.8 An established player's performance in a tournament is measured by $R_p = R_o - D_a - D_e$ where R_p is the performance rating, R_o is the player's rating at the beginning of the period, D_a is the difference based on the actual score, and D_e is the difference based on the expected score.
- 4.9 A limit is applied to the number of rating points that can be gained from any one tournament by: $L(\Delta R) = (5r + 5) \times (R_p - R_o) / 100$ where $L(\Delta R)$ is the limit change in rating and r the number of rounds played.
- 4.10 At the end of each rating period the new ratings for established players are calculated by the formula $R_n = R_o + \Sigma \Delta R$ where R_n is the new rating and $\Sigma \Delta R$ is the sum of the rating changes.
- 4.11 The new rating R_n of an established player cannot exceed the player's performance rating for the entire period. This performance rating is calculated as for R_p taking into account all tournaments played, any rating point deductions, and any tournaments won.

5. Rating Periods

- 5.1 All ratings remain effective for the following period of four months.

6. Maintenance

- 6.1 Each player shall be identified by a unique code number.
- 6.2 Any established player inactive for ten years, and any provisional player inactive for five years, shall be deleted from the rating file. Such players shall be treated as unrated if they subsequently return to rated tournament play.
- 6.3 All NZCF tournaments shall be rated.

- 6.4 Other New Zealand tournaments shall be rated only if all competitors are members of clubs affiliated to the Federation. Advance notice that the tournament qualifies for NZCF rating must have been given and at least 50% of the players in each such tournament must already be rated. The organiser of a tournament qualifying for rating under this rule must provide a signed certification that the above conditions have been met.
- 6.5 Games played either at a rate faster than 90 seconds a move, or subject to adjudication, or played against computers, shall not be rated.

7. Reporting Procedures

- 7.1 Tournament results should be submitted to the NZCF Secretary as soon as possible after the tournament is finished and, in any case, within three weeks. The information required falls into three categories: tournament information, player information, and results.
- 7.2 The tournament should be properly identified with starting and finishing dates given. The time controls should be specified and, in the case of tournaments qualifying under rule 6.4, the required certification should be attached.
- 7.3 Players should be placed in order of their final rankings together with full first names, club memberships, numerical code numbers and ratings. Where details of a player's name differ from those appearing on the current rating list or code number list an explanation should be provided.
- 7.4 For a round-robin tournament each player's results should be given (as 1, ½, 0) against each opponent together with his final score (see Form 1). For a swiss tournament each player's results should be listed separately with opponents' names and code numbers, and final score (Form 2).
- 7.5 Any game won or lost without play should be indicated by an asterisk (*) and any unusual circumstances which might affect the validity of a result should also be described.
- 7.6 Organising clubs shall be liable for a fine of \$20 in respect of any tournament where results are submitted late or not at all, or where the required information is incomplete.

Form 1: Tournament Report for Round Robin

Tournament																
Rank No.	Players		Code	Club	Rtg	Scores vs Opponent No.										Total
	Surname	First Names				1	2	3	4	5	6	7	8	9	10	
1						x										
2							x									
3								x								
4									x							
5										x						
6											x					
7												x				
8													x			
9														x		
10																x

Certified as a correct report and that the conditions of rule 6.4 have been met.

Signed Date

Form 2: NZCF Rating Card (for Swiss Tournament)

Tournament						Rank No.	
Surname				Club		Rating	
First Names				NZCF Code		Place	
Round	Colour	Opponent	Code	Result	Remarks	Total	
1							
2							
3							
4							
5							

Note: Whichever format is used to report tournament results for rating, they must be accompanied by a completed Tournament Report form (Supplementary Regulation 4.4).