

Merit System Policies and Procedures

Mid-Gauteng Chess Union

Version 1

Mid-Gauteng



**Skaakunie
Chess Union**

1. Introduction

The objective of this document is to clarify the policies and procedures of the Mid-Gauteng Chess Union Merit system.

A merit system is to be used to determine a ranking system for all active Mid-Gauteng Chess Union players to apply in the selection of teams and allocation of awards. As mandated the system should be mathematically consistent, transparent, fair and prove integrity.

The merit system is aligned to incentivising increased activity and therefore discriminates against a lack of activity. A chronological weight is applied to recognise development of the player in the current measured period.

1.1 Abbreviations & Descriptions

1.	RP	–	Performance Rating
2.	ARP	-	Adjusted Performance Rating
3.	AgeI	-	Age Inflation
4.	Bye	–	As per the swiss or Round Robin system definition
5.	Default	-	As per the swiss or Round Robin system definition
6.	Tournament	-	FIDE or Chessa Rated Normal Chess Tournament

1.2 Applies to:

- All active mid-Gauteng Chess Union Members

2. Basis of calculation

1. The main merit system will be based on a ranking system of the sum of the best performance ratings in tournaments in the current year with straight line inflation depending on age group. The premise of the system is similar to the well understood Grand Prix system as displayed by Chessa and FIDE barring the inflationary aspect.
2. Only the best 2 tournaments will be used up to the 1st Inter-Union of the year. Thereafter 3 tournaments will be used except for the selection of the SAJCC U8 – U14 teams which will be done using the following equation:

$$\text{Merit Score} = (\text{Best ARP} \times 23\%) + (\text{Second best ARP} \times 23\%) \\ + (\text{Third Best ARP} \times 23\%) + (\text{ARP of GM Trial} \times 31\%)$$

The merit score of players who are not able to attend the closed and that have been excused by the selection committee will be determined using only the best 3 tournaments.

3. Inflation of RP will be done using the following constants:
 - 3.1 Age group U8 – U10 – 1.5% per month.
 - 3.2 Age group U12 – U14 – 1% per month.
 - 3.3 Age group U16 – Open – 0.5% per month.

Inflation is based on the assumed reduction in the learning curve with age and is referred to as AgeI.

4. In the case where a player is not awarded a rating yet the player will be awarded a provisional rating. Provisional ratings will be applied per age group in line with the following:

4.1	U8	-	700
4.2	U10	-	900
4.3	U12	-	1100
4.4	U14	-	1300
4.5	U16 – Open	-	1500

3. Equation Elements

1. Performance Rating (RP):

- 1.1 Performance ratings should be determined using the FIDE RP formula:

$$RP = \text{Average opponent rating} + 400 * \frac{(\text{Games Won} - \text{Games Lost})}{\text{Games Played}}$$

- 1.2 The following criteria applies to performance rating:

- i) Points earned by virtue of a bye or default will be omitted from the formula.
- ii) At least 4 valid games should be included in the performance calculation of one tournament. Less valid games will nullify the result of the tournament.

2. Adjusted Performance Rating (ARP):

- 2.1 ARP is determined by adding an AgeI percentage to the RP based on the month of year. The formula is:

$$ARP = RP * (1 + (\text{AgeI} * \text{Month of year}))$$

4. Criteria valid tournaments

1. All the rated tournaments are merit tournaments and are marked as such on the calendar.
2. All other tournaments can be presented to the GM-committee for approval as a merit tournament, should it achieve the following criteria:
 - 2.1 Data must be supplied to GM in the Swiss Arbiter programme format or as accepted by CHESSA

- 2.2 The tournament must be CHESSA registered and rated.
- 2.3 There must be at least 5 players in a section for Round Robin and 8 for Swiss tournaments.
- 2.4 Minimum time schedule is 61/61 (Normal Chess)
- 2.5 Minimum of 5 rounds
- 2.6 Personal and contact details of all players must be available
- 2.7 Ratings used in tournament for pairing purposes are not older than 2 publications prior to the start date of the tournament.

5. Validity and consistency of system

1. The system is dependant on a stable rating environment where statistical consistency can be reasonably proven. It is based on the CHESSA standard for calculation ratings as published December 2009 and will be affected by changes on the method. It is therefore required to re-evaluate the system should any of the following elements change within the CHESSA rating formulae:
 - 1.1 New ratings are determined using a minimum of 12 rated games.
 - 1.2 The K factor for ELO calculation does not exceed 30 for new players.
 - 1.3 General alignment is kept to the FIDE ELO system.

6. Process for calculating merit scores

1. Check readability, consistency and validity of submitted tournament data.
2. Subsitute provisional ratings per age group.
3. Normalise score to exclude Bye and Default games.
4. Determine performance rating per player.
5. Append merit point per player to main merit database.
6. Submit merit calculation of tourmanent to merit committee for ratification.
7. If ratified, publish data.

7. Merit Committee

1. A merit committee should be established with a chairperson and at least 2 other from the union. The merit committee's function is to:
 - 1.1 Calculate and audit the merit score of the union.
 - 1.2 Interigate resultant merit scores and test against the intent of the merit system.
 - 1.3 Make suggestions to improve the system.

Approved On behalf of MGCU Committee

Name	Signature