
#### Abstract

04.1. Swiss System Based on Rating (The Dutch System) Comments on the new version as proposal to the FIDE Congress Krakow 2011 Preface: During the meeting 2010 we found out that the Dutch Swiss Rules could not be amended because of many unclear rules which give room to different interpretations. Therefore any amendment created more problems than they solved. It was decided to try to find a new wording that avoids such problems. The task was to find a more precise explanation without any substantial change to the rules. Now we have a result which with one exception (see C.4) follows as close as possible the old rules. I cannot exclude that on the one or another position a small change may occur. This is not intentional and we should discuss whether such a change is acceptable. Until now the new wording is a result of long discussions with Riccardo Ricca who was a very worthful and competent partner in this work. Without his contributions this work would not be as it is now. I expect some intense discussion and hope that Riccardo Ricca will continue to help defending this paper.


## A. Introductory Remarks and Definitions

A. 1 Rating
No change of the wording.
A. 2 Order

No change of the wording

## A. 3 Score Brackets

No change of the wording
A. 4 Floats

No change of the wording
A. 5 Byes

No change of the wording
A. 6 Subgroups, Definition of P 0
At the start of the pairing of a score bracket there is nothing new here. Instead of $P$ the
parameter $P 0$ is defined here because the parameter $P$ is defined differently later.
A. 7 Colour differences and colour preferences

There is nothing new in A.7.a to A.7e. A.7f introduces the player who start late in the tournament and have not played any game. Therefore the new wording is more precise.

The definition is more precise than before and integrates all players in the formula. Instead of $X$ the parameter $X 0$ is defined here because the parameter $X$ is defined differently later.

## A. 9 Transpositions and exchanges <br> No change

## A. 10 Definition: Top scorers

This is just a definition to use a simple word in the whole paper

## A. 11 Quality of Pairings, Definition of X and P

This is not a rule but just a description of the principle method used in these rules.

## B. Pairing Criteria

No change. B2 has got a new wording, but no change of the content.

## C. Pairing Procedures

No change
C. 1 Incompatible player

No change. ( the condition B2 is described more precisely)

## C. 2 Determine P0

No change: P0, New: $\mathbf{X 0}$ will be set in $\mathbf{C} .3$ dependent from $\mathbf{P}$
C. 3 Set requirements X, B5/B6, A7d

This is newly worded. Here the requirements are set for the iterative procedure.
C.3.a In a homogeneous score bracket set $P=P 0$ In a heterogeneous score bracket set $\mathbf{P}=\mathbf{P 1}=$ number of moved down players
C.3.b (top brackets in the last round) Install B2
C.3.c (odd rounds) Install A7.d
C.3.d Set $\mathrm{X}=\mathrm{X0}$ according to A 8 definition (i.e. $\mathrm{X0}=\mathbf{P}-\min (\mathrm{W}, \mathrm{B})-\mathrm{w}-\mathrm{b}-\mathrm{a})$
C.3.e If the bracket produces downfloaters, install $B 5$ for downfloaters
C.3.f If the bracket produces downfloaters, install B6 for downfloaters
C.3.g (heterogeneous groups) install B5 for upfloaters
C.3.h (heterogeneous groups) install B6 for upfloaters

## C. 4 Establish sub-groups

Put the highest $P$ players in $S 1$, all other players in $S 2$
This is new: The old rules put the half of the players in S 1 for the total pairing of the score bracket.
The proposed new rule put $P$ players in $S 1 . P$ is starting with $P=P 0$ (like in the old rules) but $P$ will be reduced if less pairs can be made.

## C. 5 Order the players in S1 and S2

No change
C. 6 Try to find the pairing

This is new and more precise than the old rules.
Pair the highest player of S1 against the highest one of S2, the second highest of S1 against the second highest one of $S 2$, etc.
If now $P$ pairings are obtained in compliance with the current requirements the pairing of this score bracket is considered complete.
In case of a homogeneous or remainder score bracket: remaining players are moved down to the next score bracket. With this score bracket restart at C1

In case of a heterogeneous score bracket: only players moved down were paired so far.
Mark the current transposition and save all the current requirements (it may be useful later).
Redefine $\mathbf{P}=\mathbf{P} \mathbf{2}=\mathbf{P} 0-\mathbf{P} 1$
Continue at C 4 with the remainder group.

## C. 7 Transposition

No change

## C. 8 Exchange

No change
C. 9 Go back to the heterogeneous score bracket (only remainder)

The new wording is more precise than the old one.
C. 10 Lowering the requirements in homogeneous and heterogeneous score brackets

This is new and more precise than the old rules
C.10.a (heterogeneous bracket) Drop B6 for upfloaters and restart from C. 4
C.10.b (heterogeneous bracket) Drop B5 for upfloaters and restart from C.3.h
C.10.c Drop B6 for downfloaters and restart from C.3.g
C.10.d Drop B5 for downfloaters and restart from C.3.f
C.10.e If $X<P$, increase $X$ and restart from C.3.e
C.10.f In odd rounds, drop A7.d and restart from C.3.d
C.10.g For top scorers, drop B2 and restart from C.3.c

Any criterion may be dropped only for the minimum number of pairs in the score bracket.

## C. 11 deleted <br> (see 10.e)

## C. 12 Change previous Score bracket No change

C. 13 Lowest Score Bracket

No change

## C. 14 Decrease $\mathbf{P}$

This is new and more precise than the old rules
For homogeneous score brackets:
As long as $P$ is greater than zero, decrease $P$ by 1.
If $P$ equals zero the entire score bracket is moved down to the next one.
Start with this score bracket at C1
Otherwise, as long as $\mathbf{X 0}$ is greater than zero, decrease $\mathbf{X 0}$ by 1 and restart from C3.a

For heterogeneous score brackets:
If the pairing procedure has got to the remainder at least once, reduce $P 0$ and $X 0$ as in the homogeneous score brackets and restart from C.3.a
Otherwise reduce $P$ and P1 by 1 and restart from C.3.b

## D. Transposition and exchange procedures

## D1. Transpositions

The description of the transpositions is just a more precise description of the current rule. There is no change in the algorithm.

## D2: Exchange of players (homogeneous or remainder score bracket only)

The description of the exchanges should be just a more precise description of the current rule which in the first sentence of $D .2$ gives a very short advice.
The example in the old description does not mention repetitions of solutions at some points.
Any repetition has no influence on the final solution because each solution which is repeated gives no new solution and can be ignored.
As the new description does not omit these repetitions the solutions of the new description are identical with to solutions of the old description.
The new description enables each arbiter to proceed exactly the same way.

## E. Colour Allocation Rules <br> No change

## F. Final Remarks

No change
Forstern, 2011-07-19
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