Swiss Pairing Programs

5 September 2012, 11.00-13.00

Chairman: Christian Krause (GER),

Present: Roberto Ricca (ITA), Kevin Bonham (AUS), Jouni Lehtivaara (FIN), Tony Rich (USA), Rathinam Anantharam (IND), Franca Dapiran (ITA), Stephen Boyd (FRA), Shaun Press (PNG), Stubenvoll Werner (AUT)

The meeting was basically divided into two parts. In the first one, it was shown the new wording regarding the decisions that were taken in the first meeting. It involves the following articles of the rules:

- [a] C.2 (just new indices), C.13 and C.14 to cope with a blocked lowest heterogenous score bracket
- [b] **C.12**, to correct the reference to the variable representing the total number of pairs for the bracket and to make a precise statement regarding new sets of floaters: they must have the same number of players and the same scores (the latter condition being just added)
- [c] C.8, now divided in two parts, **C.8.a** (the old C.8) and **C.8.b** which copes with moved-down players' exchanges; also the new section D.3 was added to explain the proper sequence of such exchanges
- [d] **A.7** and **F.3** that now clarify that unplayed games don't enter the picture in any way regarding colour preferences

In the second part of the meeting, some interpretation problems regarding the B.3 criterion were presented and solved:

- [a] it was agreed that **B.3** is more important than **A.7.d**; this means that A.7.d, besides not being applied when it generates additional downfloaters, is also not applied if produces downfloaters with higher scores or if prevents pairings between players with scores as small as possible
- [b] it was agreed that **B.3** is more important than **B.2** for top scorers in the last round; therefore B.2 is not only ignored in order to avoid more downfloaters but also to avoid floaters with higher scores
- [c] it was agreed that B.3 is a computable criterion and the best way to calculate it is using **the sum of the squared differences** between the scores of the players in each pair (a floater is virtually paired with a player with zero or less points), with the lowest sum defining the best pairing.
 - However, it was also agreed that the above definition will be given to the programmers but the goal is to find a more readable and comprehensible definition for the hand pairing.
- [d] in the end, an interesting case study came up: two players, A and B, with 6 points, both expecting white, float in the 5.5 group where there is a single player. One of A and B has to downfloat again. In choosing whom, does it merit any consideration that B downfloated also in the previous round? It was agreed that for the current B5 and B6 rules it doesn't (B is a downfloater anyway), but it was also agreed to think about a rule change to be discussed in the next Antalya congress.

Swiss Pairings Programs

2 September 2012, 09.00-13.00

Chairman: C. Krause (GER)

Present: R. Anantharam (IND), M. Prevenios (GRE), A. Burstein (ISR), S. Press (PNG), N. Mendez (PUR), R. Ricca (ITA), M. Fayad (AHO), F. Dapiran (ITA), W. Brown (USA), K. Bonham (AUS), A. Nooh (MDV), P. Nimityongskul (THA), C. Nsaonaya (ZAM), I. Vereschagin (RUS), S. Muratkuliev (TKM), D. De Ridder (BEL), T. Rich (USA), W. Stubenvoll (AUT), A. Vardapetian (ARM), G. Gijssen (NED), G.Debessu (ETH)

1. Revision of general Swiss Principles

- a. It was agreed that the structure of the whole Section C.04 (FIDE Swiss Rules) should be reviewed.
 - A complete proposal will be presented to next Congress.
- b. A new version of the section C.04.5.B (General rules for Swiss Systems for individual tournaments) was agreed. See page 4.

2. Dutch System

- a. Two problems were discovered in the wording of the rules C.12 and C.13 and were exploited.
 - A correct wording will be published soon in the handbook.
- b. The problems regarding C.12, A.10, A.7.2-F.3, C.8, presented in the Annex-3 of the Agenda were discussed and the proposed solutions accepted.
 - The wording will be published soon in the handbook.
- c. The problems regarding B.3 presented in the Annex-3 of the Agenda were discussed.

3. Report on running endorsement procedures

- a. We have defined the full endorsement process (see page 5)
- b. Mr. Ricca reported the status of the running endorsed procedures for the program JavaPairing of Mr. Cervesato (ITA).

Mr. Cervesato did an excellent good job and even though his program was judged not yet ready for endorsement, we fully expect that it will be presented to the next Congress.

4. Endorsement of Vega 6.3 with the JaVaFo 1.1 engine

Various testing were performed on Vega 6.3 // JaVaFo 1.1 by Mr. Press, Mr. Freyd and Mr. Stubenvoll. They stated that the pairing engine respects the rules given in the FIDE Handbook, section C.04.1 and they recommended the endorsement of the software package.

The Commission acknowledged the reports and unanimously accepted their advice.

5. Time schedule and procedure of checking the endorsed programs according to the new wording

On one side the rules of the Dutch System have a new wording with some new aspects which the Commission is not sure that they were implemented in the already endorsed programs.

On the other side, with javafo, a tool is available to carry out a validation check of the pairings produced by the above mentioned programs.

Therefore the Commission is proposing as follows:

- [1] the programmers of all endorsed programs shall provide the Commission with the latest version of their programs
- [2] the programs will be checked by SPP representatives whether they fulfill the Swiss Rules as they are now
- [3] until July 1st 2013 the programmers will be informed about the findings and what they possibly have to do in order to adapt their programs to the current Swiss Rules;
- [4] the situation of all the endorsed programs will be reported to the Congress 2013
- [5] the necessary upgrades of the programs shall be performed before May 31st 2014
- [6] the Congress 2014 will confirm the endorsement for the programs that are following the current Swiss Rules
- [7] programs that on May 31st 2014 will not meet the requirements or the programmers of which at any time do not cooperate in this process will lose their endorsement

Christian Krause (Chairman)

SECTION C.04.5.B

General rules for Swiss Systems for individual tournaments

а	The number of rounds to be played is declared beforehand
b	Two players shall not play each other more than once
С	Should the total number of players be (or become) odd, one
	player is unpaired. He receives a bye: no colour and as many
	points as are rewarded for a win, unless the rules of the
	tournament state otherwise
d	A player who, for whatever reason, has received any number
	of points without playing, shall not receive a bye.
е	In general, players are paired to others with the same score
f	The difference of the number of black and the number of
	white games shall not be greater than 2 or less than −2.
	Each system may have exceptions to this rule in the last round
	of a tournament.
g	No player will receive the same colour three times in a row.
	Each system may have exceptions to this rule in the last round
	of a tournament.
h	1. In general, a player is given the white pieces as many
	times as he is given the black pieces.
	2. In general, a player is given the colour other than that
	he was given the previous round.
i	The pairing rules must be such transparent that the person who
	is in charge for the pairing can explain them

The endorsement process

In 2011 the SPP defined a new methodology to conduct the endorsement process. Now if the authors of a pairing program (in the following: *candidate*) want their software to be endorsed by FIDE, they are involved in a process that consists essentially in two phases.

With the assistance of a SPP representative that is assigned to that specific endorsement procedure, the first phase is carried out by the authors themselves. If they wish, they could be helped by an auxiliary tool, named <code>javafo¹</code> (available at <code>javafo.tornelo.com</code>), that is useful to understand whether the pairings generated by the <code>candidate</code> are compliant with the rules.

This phase is divided essentially in two steps. In the first one, the most important, the authors use self-generated TRF²(s) related to some tournaments that have very precise peculiarities (usually lot of rounds and a variable number of players, just to see how the *candidate* reacts in very stressful conditions).

In the second (optional) step, the SPP representative may give them some further TRF(s) that the *candidate* has to correctly identify whether they contain good or wrong pairings.

During the first phase, the SPP representative deals very scarcely with the *candidate* as a program. He fully trusts the authors, assuming that the TRF(s) generated are produced by the *candidate*. His only goal is to check if the pairings are correct. The real check of the program is made during the second phase, by other SPP representatives, usually two or more, once that the *candidate* passes the first phase.

Back to it. As said above, the authors can check the TRF(s) produced by the *candidate* with *javafo*. If the latter does not complain, fine. Otherwise the authors are requested to understand why there is a discrepancy (they can obviously ask for help by the SPP representative). Their analysis can open essentially three possibilities:

- [1] the *candidate* generates wrong pairings: fine, the authors correct their program and repeat the process
- [2] *javafo* generated wrong negatives; fine again, the problem will be reported to the author of *javafo* requesting a correction in a reasonable time
- [3] the rules are not written very clearly; they may have some holes which can be interpreted in different ways by the *candidate* and by *javafo*; in such instances, it is the SPP duty to fix the wording of the rules as soon as possible, in order to avoid this kind of discrepancies

When the TRF(s) produced by the *candidate* get to the SPP representative, only discrepancies depending on the second or the third type can be accepted. If there are still discrepancies depending on errors of the *candidate*, the endorsement process will either be suspended or fail. The authors will be notified when they can resume a suspended procedure (usually it will be some time after the first incoming Congress) or restart a new endorsement process for their software (after about one year).

¹ JaVaFo is both a pairing engine and a pairing-verification tool authored by Roberto Ricca, the current SPP Secretary

² TRF stands for Tournament Report File. It is the file used to exchange tournament data with the Rating Officer. Such file is formatted with the data-exchange format specification defined by our chairman and approved by the Executive Board at Dresden in 2005. Until recently, the definition of the format could be found on the FIDE website at ratings.fide.com/download/Fidexchg.txt, but now has disappeared. A copy has been stored on the Internet at javafo.tornelo.com/fidexchg.txt.