# CHESS ONLINE PAIRING PROGRAM (COPP) OFFICIAL REPORT

The FE-1 application of the Chess Online Pairings Program (COPP, from now on) was submitted on July 5, 2023, for the version 7.7. At that time there was no other visible sub-number accompanying the product to allow its identification, nor was it retrievable. An updated application was then submitted on December 8<sup>th</sup>, and this time a build number (1230) was mentioned that would identify the product described here.

COPP (*this description was prepared by the COPP's author*) is built into the <u>https://chessresults.ru/en</u><sup>1</sup> site and operates as an online service. In order to pass the FIDE endorsement process, COPP has been copied to a virtual machine which is similar with the main site/server.

Such a virtual machine has been delivered to the *people in charge of the endorsement* (PICOTE, from now on) and is stored on the PICOTE's machine. Thus, in addition to being a very precise reference to what was tested by the PICOTE (and the source of the corresponding recommendation), it can also be shown to FIDE personnel who may be interested.

The evaluation of COPP was done using the virtual machine and following what is written in Appendix A of Section C.04 (Endorsement of a software program), and in particular what is written in Article A.2 (reported below), which is a sort of driver for the whole endorsement process.

*Note.* All references to the Pairing Systems and Programs Commission, or SPPC, should be read as referring to the Technical Commission, or TEC, which has assumed the functions of the former SPPC.

Each author of a program that helps to manage a chess tournament can apply for the FIDE endorsement by submitting an FE-1 form (see Annex-1).

For an endorsement application to be considered, the program must be able to manage Swiss tournaments using the FIDE (Dutch) System (see C.04.3) or any other pairing systems approved by FIDE (see C.04.4.1-3). The endorsement is given for the specific pairing systems (one or more).

Any program asking for endorsement should provide (explicitly or implicitly) a **FIDE mode**, which should offer all the functionalities and services required by FIDE for a tournament-managing program to be endorsable *(see below)*.

The program is to be endorsed in the FIDE mode. Moreover, it must provide the following services:

- an English language interface
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- the capability to import and export files coded in the FIDE Data Exchange Format (see A.3.1 and Annex-4)
- the public availability of a (free) pairings checker (FPC see A.4)
- the public availability of a (free) generator of simulated tournaments (RTG, see A.5), unless exempted by

<sup>&</sup>lt;sup>1</sup> Later amended in <u>https://chessresults.ru/en/copp</u>, which is the official Internet address of the program to be endorsed.

the System of Pairings and Programs Commission (SPPC)

- the possibility to be checked in a controlled environment
- the compliance with all the requirements presented in the Verification Check List (see Annex-4)

The applicant should consider that merely complying with all the aforementioned requirements is not enough to receive a FIDE endorsement.

The FIDE mode may also offer additional services or functionalities, provided that they are not explicitly prohibited by FIDE, on condition that those services and functionalities may not cause pairing mishaps for FIDE mode users.

If, during the period of validity of the endorsement (see A.8), a breach of the above conditions is reported to the SPPC, and verified by the Commission, the endorsement may be immediately suspended (pending further investigation) or permanently revoked. In the latter case, the program reverts to the status of a new program to endorse.

#### Let us examine COPP point-by-point.

Each author of a program that helps to manage a chess tournament can apply for the FIDE endorsement by submitting an FE-1 form <i>(see Annex-1)</i> .	The FE-1 application was sent on July 5 <sup>th</sup> , 2023 and resent on December 8 <sup>th</sup> .
For an endorsement application to be considered, the program must be able to manage Swiss tournaments using the FIDE (Dutch) System <i>(see C.04.3)</i> or any other pairing systems approved by FIDE <i>(see C.04.4.1-3)</i> . The endorsement is given for the specific pairing systems (one or more).	The endorsement request is for the FIDE (Dutch) System.
Any program asking for endorsement should provide (explicitly or implicitly) a <b>FIDE mode</b> , which should offer all the functionalities and services required by FIDE for a tournament-managing program to be endorsable <i>(see below)</i> . The program is to be endorsed in the FIDE mode.	The FIDE mode is automatically provided at the creation of a tournament. For more details see VCL.01.
Moreover, it must provide the following services: • an English language interface	Since the site is mainly used by Russians, Russian is its main language. However, for the sake of support, the most important parts have been translated into English and, starting from the main page ( <u>https://chessresults.ru/en/copp</u> ) and going down, it can be efficiently used by English reading people, although here and there some Cyrillic words appear. The overall experience can be further improved by using the browser feature that automatically translates web pages from Russian to English. COPP manual ( <u>https://chessresults.ru/en/docs/guide</u> ) is well prepared, and everything that should be documented for somebody to use COPP is satisfactorily described in plenty of detail.
• the capability to import and export files coded in the FIDE Data Exchange Format (see A.3.1 and Annex-4)	Import/export mostly work as requested (more details later).

<ul> <li>the public availability of a (free) pairings checker (FPC - see A.4)</li> <li>the public availability of a (free) generator of simulated tournaments (RTG, see A.5), unless exempted by the System of Pairings and Programs Commission (SPPC)</li> </ul>	As COPP uses the JaVaFo pairing engine <i>(more details later)</i> , these services are provided through JaVaFo.
the possibility to be checked in a controlled environment     the compliance with all the requirements presented in the	Since the program runs on a website, it is the antithesis of a controlled environment. However, as mentioned above, a virtual machine (with a server installation) was provided and tests could be run on it with the Internet switched off. The verification check-list will be thoroughly commented later.
Verification Check List (see Annex-4)	
The FIDE mode may also offer additional services or functionalities, provided that they are not explicitly prohibited by FIDE, on condition that those services and functionalities may not cause pairing mishaps for FIDE mode users.	COPP includes the ability to define custom accelerated systems, manual introduction or modification of pairings, extensive customization of non-standard scoring systems, and forbidden pairings (more details later).

### Verification Check-List (VCL)

01	the FIDE mode must be the default operating mode of the software	When a new tournament is created, it is created in FIDE mode. After being warned that they cannot come back to FIDE mode after the first round has been paired, users can switch to a Custom mode.
02	it ought to be possible to enter the FIDE mode by a standard installation of the tournament manager, as well as by a standard invocation of the program	This is properly dealt with <i>(see VCL.01)</i> . This item can be deemed inapplicable, the reason being that the program runs on a website, so the only possible starting action is the creation of a new tournament.
03	the default pairing system activated by a standard invocation must be the one for which the program is endorsed and it must be clearly specified - however, if the program is endorsed for more than one pairing system, the standard invocation should activate one of the systems for which the program is endorsed	By default, tournaments are created for the FIDE (Dutch) System, called "Swiss (Dutch)". No other pairing system can be used while in FIDE mode.

04	every pairing-related service available in the FIDE mode must show a correct behaviour	This is quite a wide field for COPP. The default scoring system is 1/½/0, but it is possible to define any scoring system, provided that the number of points assigned for wins (and full-point byes), draws (and half-point byes), and over-the-board losses be between 0 and 9.9 ( at most one decimal), points for a win be greater than points for a draw, which by themselves are greater than points for a loss. Also, two draws cannot be worth more points than a win plus a loss, forfeit losses and zero-point byes are always zero. It is not possible to define a different number of points depending on the colour. Pairings can be freely changed by the arbiter after the program has generated them. By default, zero-point byes are given to announced absent players (or manually defined by the arbiter). Then full-point byes (after proper warning) or half-point byes can be manually assigned to those players. COPP allows to define forbidden pairings. It is unclear whether this is formally allowed, but the program works correctly when they are present. According to rule C.04.2.D.8, COPP allows result changes in the last published rounds or in the next-to-last round, but not earlier. As a consequence, the provisional result for adjourned games (draw) can only be used for pairing one round.
05	the FIDE mode must inhibit whatever functionalities or services that may be explicitly prohibited by FIDE	It is difficult to check if something that should not be available is actually available, but in COPP an excellent work has been done to prevent the standard FIDE mode operation from creating dangerous situations, apart from the possibility to adjust the number of rounds, the PAB value and the scoring point system after a successful TRF import, which is an unavoidable evil to have a minimum of flexibility (read: importing partial TRFs).
		No new entries are allowed after the fourth round has been paired (same time limit as rule C.04.2.B.3 - although no request was extended in this regard), which cannot be considered against rule C.04.2.C2 (second item in the list), because the latter does not clearly specify how to deal with latecomers arriving for the fourth round or later.
06	the word FIDE cannot be used for any pairing-related service that is currently not endorsed by FIDE	This is properly dealt with.
07	all the pairings produced by the software must strictly adhere to the rules of the pairing system	As mentioned above, COPP in FIDE mode uses JaVaFo as its pairing engine. This is not a 100% guarantee that the pairings are correct, because JaVaFo, has some very minor weaknesses in normal pairings when compared to the pairing engine provided by BieremaBoyzProgramming and available at <a href="https://github.com/BieremaBoyzProgramming/bbpPairings">https://github.com/BieremaBoyzProgramming/bbpPairings</a> .
08	pairing must be done using pairing numbers, not ratings (except for the Dubov System, of course)	This is properly dealt with.
09	pairing numbers cannot be changed after the fourth round has been paired (accordingly to rule C.04.2.B.3)	This is properly dealt with.
10	the acceleration systems defined in the FIDE handbook <i>(see C.04.5)</i> must be implemented	The Baku Acceleration Method (currently the only one described in the handbook) is implemented correctly. It is possible to define custom acceleration methods, that work properly.
11	the program must offer the capability to correctly import a TRF (implementing version TRF16 is mandatory - implementing also version TRF06 is recommended)	Importing a TRF correctly rebuilds the results cross-table. When importing from TRF16, the scoring system is properly inferred as long as it follows the rules used by COPP to define a custom scoring system (see VCL.04). All "letter" codes (i.e. W, D, L, F, H, Z, U) are read correctly.
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12	the exporter in the TRF format (version TRF16) must be done in such a way that the output can be correctly analyzed by a pairing-checker, even when a different scoring point is used - it is recommended that such export is done using UTF-8 encoding	COPP can perform a TRF export at any time during the tournament, not only at the end. When the TRF export is performed at the right moment, it follows the TRF16 specification and it complies with the VCL request (tests were performed in tournaments where the 3/2/1/0 scoring system was used and where the score assigned to the PAB was draw - 2 points). When an export is made before the end of the tournament (or when there are still adjourned games), it is possible that its contents do not conform to the TRF16 specification, but no warnings will be given to indicate such a situation. Basically, it is up to the user to verify that the TRF export can be used as a proper rating report.
		The ability to export a tournament according to the TRF specification is not mentioned in the COPP manual as a way to export a tournament.
13	management of unusual results (like $\frac{1}{2}$ -0, $0$ - $\frac{1}{2}$ or an unforfeited 0- 0) must be available; on the other hand, inconsistent scores (like 1- $\frac{1}{2}$ or 1-1) are not allowed	<ul><li>COPP provides a list of possible scores, and only scores from that list can be entered. All of them are ok.</li><li>It is also possible to enter "quick" (or "unrated") scores, which are mapped in the TRF with W, D, and L codes.</li></ul>
14	possible forfeit results are only: 1F-0F, 0F-1F, 0F-0F - forfeit draws are not allowed	This is properly dealt with.
15	adjourned or postponed games (if allowed by the program) must be managed properly	A game may be marked as $"A\frac{1}{2}-A\frac{1}{2}"$ (meaning adjourned). In this case, it is considered a draw for the pairing phase. A result must be entered before pairing the second round after the round in which the adjournment occurred.
16	it must be possible to define the value (usually win or draw) for the pairing-allocated bye	This is properly dealt with (also loss is allowed).
17	it must be possible to assign half-point byes; if the software allows the assignment of full-point byes: upon assignment, a warning must be issued, stating that this practice is deprecated by FIDE	This is properly dealt with. Players can be declared absent, and then their score for the round (which is zero by default) can be set to half a point, or even, after a warning that full-point by assignments are deprecated by FIDE, to a full point.
18	the program should make the official FIDE rating list readily available; or, failing that, it should offer adequate facilities for an arbiter that would like to use it	This is formally dealt with. However, from a practical standpoint, the management of the FIDE rating lists in COPP is rather lackluster. At any moment, depending on the type of time-control chosen (standard, rapid, blitz), there is only one FIDE rating list available, which is automatically updated by the server every day. The user has no control over this list and cannot use private lists. Basically, in order to enter ratings that are not available on that single list, the user has to look at external sources and enter the ratings manually.
19	all tie breaks included in the pairings software will be tested and must give the results as per the rules described in the FIDE Handbook	Ignored for now (will be evaluated in 2025). This item was added to the VCL way too early, when not all tie-break rules were clearly defined, and when the lack of automated tools capable of verifying tie- break implementations allowed only vanilla tests whose results were not meaningful enough.

#### Analysis of (supposed) weaknesses

The previous examination, with its coloured evaluation, already shows what the PICOTE considers to be the weaknesses of COPP. Green, of course, is a pass, Yellow is close, Rose is something that could be better.

Green or Yellow evaluations do not require further comment.

Regarding Rose:

- (a) (a) (VCL.05) Adjusting the scoring system or the number of rounds after importing is dangerous because it may result in wrong pairings for the imported rounds yes, as already said, it is a necessary evil to allow partial TRF import (which is useful for intercommunication between endorsed programs) and it helps to bypass a problem that FIDE itself should address (i.e. partial TRF import); nonetheless, since this is first an evaluation from a pairing standpoint, this is a warning that it is better to emphasize.
- (b) (VCL.12) Let's face it, the TRF export is not evaluated in the same way by COPP's author and the PICOTE, so the program does not really help its users to understand how to differentiate a full rating report from a partial TRF export.
- (c) (VCL.18) What the PICOTE considers an issue (and the COPP author apparently does not) is already described in the evaluation of the item; the management of rating lists is in Rose rather than something worse, simply because the endorsement rules are still more focused on pairings (see Article C.04.A.2) than on what is said in Article C.04.A.1 (*To manage big Swiss tournaments, the use of computer programs, to handle players' data, pairings and results, is necessary*).

## **CONCLUSION**

The product, identified by version number 7.7 and build number 1230, deserves to be endorsed by FIDE.

Since this report will be submitted directly to Congress, there is no need to issue an interim certificate. Therefore, if this report is approved, COPP can be added to the FIDE Endorsed Programs list at the first opportunity.

This report is to be annexed to the minutes of the Technical Commission meeting.

Torino, December 11<sup>th</sup>, 2023