## RULES FOR THE 20th WORLD COMPUTER-CHESS CHAMPIONSHIP

Yokohama, Japan

### August 12 – 18, 2013

### The Board of ICGA

The 20<sup>th</sup> World Computer-Chess Championship will take place from August 12 – 18, 2013 in Yokohama, Japan, in the Annex Hall of the Pacifico Convention Complex. We are grateful to The Brain and Mind-Sports Foundation that they have offered to sponsor and organize five events in cooperation with the ICGA, viz. the 20<sup>th</sup> WCCC, the 4<sup>th</sup> WCSC, the 2013 World Computer Chess Blitz Championship, the Brain & Mind-Sports Computer Olympiad, and the 7<sup>th</sup> International Conference on Computers and Games (CG2013). Here we recall that the Maastricht Triennial Meeting in 2002, i.e., the first ICGA meeting (instead of ICCA), decided that the WCCC should be held annually without distinguishing any type of machines. The observation was clear: all kinds of differences between microcomputers, personal computers, "normal" computers, and supercomputers were in some sense obsolete and the classification thus was considered artificial. So was the division into the classes of single processors and multiprocessors.



The Pacifico Yokohama Convention Complex

Another division considered obsolete in the competition since 2002 is that between amateur and professional. Is not the real amateur a professional? Or the other way round? For organisational matters we have kept this difference, since for amateurs the cost of travelling and housing is already expensive. Being treated as a professional may be agreeable, but if you have to pay for it then it might be less agreeable. As in previous years we have maintained three groups here, viz. the amateurs, the semi-professionals, and the professionals. The ICGA is continuing its policy on this point (see below), and will be more rigorous than in the past when determining the status of participants.

Following the survey conducted amongst chess programmers after the WCCC tournament in Pamplona, the ICGA announced the inauguration of a new tournament for 2010 and subsequent years - The World Chess Software Championship (WCSC). The full details of that announcement were as follows.

[i] The World Computer Chess Championship (WCCC) for the Shannon Trophy will be contested by teams who have no restriction placed on them as to their choice of hardware.

[ii] A new tournament will be introduced called the "World Chess Software Championship" (WCSC) to be held at the same location and during the same period as the WCCC. This will be a uniform platform event using computers loaned by the host organisation. In each game played in this tournament the two computers will be, so far as is possible, identical with respect to their hardware capabilities: number of cores, processor speed, memory size.

[iii] Participants may compete in either or both of these tournaments for a single entry fee.

[iv] The time control for the WCCC will be such as to aim for a 4-hour playing session, namely all moves in 1 hour 45 minutes plus an increment of 15 seconds per move. The increment starts at move 1, i.e., the clock should be used during opening-book play.

[v] The time limit for the WCSC will be such as to aim for a 2-hour playing session, namely all moves in 45 minutes plus an increment of 15 seconds per move. The increment starts at move 1, i.e., the clock should be used during opening-book play.

[vi] The WCCC will be an 11-round Swiss System event if there are more than 12 entries, otherwise an all-playall event.

[vii] The number of rounds for the WCSC will be decided according to the number of entries in both events but there will be at least 9 rounds in the WCSC provided there are at least 10 entries; otherwise the WCSC is an all play-all event.

[viii] For the 2013 events there will be no rest day. But there will be time set aside for the speed championship.

Below we provide the rules for the 20<sup>th</sup> World Computer-Chess Championship and for the 2013 World Chess Software Championship. It was agreed at the Maastricht meeting that from the 13<sup>th</sup> World Computer-Chess Championship onwards the Shannon Trophy will be awarded annually. The original trophy is kept at ICGA headquarters in Tilburg, and each year a replica of the trophy is presented on a permanent basis to the World Computer-Chess Champion team. A trophy will be given each year to be retained by the winner of the World Chess Software Championship. The year 2012 was in all aspects an exception since the ICGA was unable to find a sponsor for the events.

Below, we have split the rules into sections of general rules and sections of tournament rules.

## GENERAL RULES - WORLD COMPUTER-CHESS CHAMPIONSHIP

- 1. The World Computer-Chess Championship 2013 is the 20<sup>th</sup> in a series of World Computer-Chess Championships. It follows the tournament rules given below.
- 2. The tournament will be an 11-round Swiss-system event, using standard (non-accelerated) Swiss pairings. The provisional playing schedule is announced on the ICGA website.
- 3. The winner of the Tournament will be awarded (1) a replica of the Shannon Trophy; and (2) the title of World Computer-Chess Champion 2013. No other titles following from the results of this tournament will be awarded. (Hence, no Amateur title, no Microcomputer title, and no single-processor title, as well as no multi-processor title.) The winner of the tournament will also be awarded a cash prize of €500.
- 4. There will be a separate 9-round Swiss tournament for a permanent trophy and the title World Computer Speed Chess Champion (see below).
- 5. Unless otherwise specified, rules of play are identical to those of human tournament play. In particular this holds for claiming a draw with respect to the three-times-repetition rule (see *ICGA Journal*, Vol. 28, No. 1, News section). If a point is in question, the Tournament Director has the right to make the final decision (with due respect to the Committee of Appeal).
- 6. Each game is played on a chessboard with a chess clock provided by the Tournament Committee.
- 7. At the end of each game, both teams are required to send in a game listing to the Tournament Director in electronic (PGN) form.
- 8. The Tournament Director will be Professor H. Jaap van den Herik. He has the power to designate assistants with the appropriate power to decide in cases of dispute. The assistant Tournament Director will be Jan Krabbenbos.
- 9. In the event of any rule disputes, or changes necessitated by circumstances at the time, the Tournament Director's decision shall be final (with due respect to the Committee of Appeal).
- 10. The members of the Appeal Committee will be agreed upon during the participants' meeting on August 12<sup>th</sup>, 2013.
- 11. The entry fees for the  $20^{th}$  WCCC are as follows:

Amateur:	€ 25
Semi-professional:	€ 250
Professional:	€ 500

In addition, at least one person in each participating team must have paid the ICGA membership fee for 2013.

The definitions are the same as used in the past. They read as follows.

"Amateur": programmers have no commercial interest in their program, and are not professional game programmers. The program's name must not be derived from or similar to a commercial product. Applicants for the amateur classification must supply information to justify their claim.

"Semi-professional": Any program submitted by an employee or associate from a gamesprogramming company. The program's name must not be derived from or similar to a commercial product.

"Professional": A program of which the name is the same as or derived from a commercial product.

Participants are <u>not</u> required to send their entry fee with their entry form. This is to allow participants to confirm their entries when they know whether or not they will receive one of the ten travel subsidies, each of  $\in$ 1,000, being offered by the ICGA. If the number of entries for Yokohama is not greater than ten, then all participants will receive the travel subsidy. In the case of participants who are awarded a travel subsidy their entry fees will be deducted from the subsidy when it is paid. Participants who are not going to receive a travel subsidy will be advised in due course as to when their entry fees need to be paid.

### Entry forms are available at www.icga.org

Entries received by April 1 will be eligible for consideration for travel subsidies.

Applicants in the chess events will be informed immediately following April 1 as to the whole list of chess programs for which a registration application has been received, and will be invited to inform the ICGA not later than April 15<sup>th</sup> if they have any objections to any of the other applicants on the grounds of cloning or program similarity, and if so to provide a detailed reasoning and/or evidence. If any applications are received for registration after April 1, those earlier applicants of which the entries have been accepted will be similarly invited.

Applicants for the chess events will be advised not later than April 30<sup>th</sup> as to the list of acceptances and the amounts of travel support that will be provided for each of them (to be paid by the ICGA at the event or immediately thereafter).

The acceptance or rejection of an entry will be determined by the ICGA President in consultation with the Tournament Director. Applicants who apply to register after April 1 will be notified as soon as possible regarding the acceptance or otherwise of their application.

## GENERAL RULES - WORLD CHESS SOFTWARE CHAMPIONSHIP

- 1. The World Chess Software Championship follows the tournament rules given below.
- 2. The tournament will be a 9-round Swiss-system event, using standard (non-accelerated) Swiss pairings. The provisional playing schedule is announced on the ICGA website.
- 3. The winner of the Tournament will be awarded (1) a trophy, for keeping permanently; (2) the title of World Chess Software Champion 2013; and a cash prize of € 500.
- 4. Unless otherwise specified, rules of play are identical to those of human tournament play (see Official FIDE Laws of Chess (November 2008) and the FIDE Tournament Rules (2011). In particular this holds for claiming a draw with respect to the three-times-repetition rule (see *ICGA Journal*, Vol. 28, No. 1, News section). If a point is in question, the Tournament Director has the right to make the final decision (with due respect to the Committee of Appeal).

- 5. Each game is played on a chessboard with a chess clock provided by the Tournament Committee.
- 6. At the end of each game, both teams are required to send in a game listing to the Tournament Director in electronic (PGN) form.
- 7. The Tournament Director will be Professor H. Jaap van den Herik. He has the power to designate assistants with the appropriate power to decide in cases of dispute. The assistant Tournament Director will be Jan Krabbenbos.
- 8. In the event of any rule disputes, or changes necessitated by circumstances at the time, the Tournament Director's decision shall be final (with due respect to the Committee of Appeal).
- 9. The members of the Appeal Committee will be agreed upon during the participants' meeting on August 12<sup>th</sup>, 2013.
- 10. The entry fees for the WCSC (exclusive of membership fee of the ICGA for 2013 for at least one person) are as follows.

For programs that are also participating in the 20<sup>th</sup> World Computer-Chess Championship and have paid the appropriate entry fee for that tournament, no charge.

For other programs the entry fees, definitions and payment requirements are all as in rule 11 for the World Computer-Chess Championship.

### Entry forms are available at www.icga.org

The acceptance or rejection of an entry will be determined by the ICGA President in consultation with the Tournament Director. Notification of acceptance will be given as soon as possible, as per the conditions for the WCCC.

# 20<sup>th</sup> WORLD COMPUTER-CHESS CHAMPIONSHIP TOURNAMENT RULES

- 1. Each entry is a computing system and one or more humans who programmed it. In the computer system there is no restriction on the hardware. At least one of the program developers should attend the WCCC to operate the program, otherwise the entry fee for the program is doubled.
- 2. Each program must be the original work of the entering developers, possibly with the inclusion of game playing code and/or data from other sources for which the entering developers have a legal right of use. Developers whose code is derived from or includes (1) game-playing code; and/or (2) data written by others, must name (a) all the other developers of whom they are aware; and (b) the source of such code and/or data, in their tournament registration details.

Programs which are discovered to be undeclared derivatives of others may be designated invalid by the Tournament Director if he is convinced, after seeking advice if he feels that to be necessary, that the closeness of derivation is of such a level as to constitute unfair competition. A listing and an executable version of all game-related code and data running on the system must be available on demand to the Tournament Director prior to the start of and during the tournament. The Tournament Director has the right to submit the executable version of a program for testing for similarity with other known programs, and/or to submit the listing to an expert or experts of his choosing for examination, also to determine similarity. Under all circumstances the Tournament Director will take all reasonable steps to ensure that any such listing and/or executable are treated as being strictly confidential.

The entering developers must keep a copy of the source code of their entry until at least one year following the date of conclusion of the tournament, in order to be able to respond accurately to any questions about the source code that might be raised after the event by the Tournament Director.

- 3. Participants are required to attend an organizational meeting on August 12, 2013 prior to the start of the tournament for the purpose of officially participating in the tournament. Operational rules will be finalized at that meeting.
- 4. The format of each tournament and the rate of play will generally be determined by the Tournament Director according to the number of programs entered and any other relevant factors. The 20<sup>th</sup> World

Computer-Chess Championship (WCCC) is assumed to be a Swiss-system event with 11 rounds in which the rate of play will be all moves in 1 hour 45 minutes plus an increment of 15 seconds per move. The increment starts at move 1, i.e., the clock should be used during opening-book play.

- 5. An operator may ask the Tournament Director to stop clocks at most twice during a game because of hardware problems or network problems. The operator can ask the Tournament Director for permission to restart the program. When restarting after a failure of any kind, the operator must reset all parameters to their values at the time the game was interrupted. Play must resume after at most a fifteen-minute delay. If operators using a remote computer can clearly establish that the network problems are not in their own computing system, but in the communication network, the Tournament Director can permit additional delay.
- 6. An operator error made when starting a game or in the middle of a game can be corrected only with the approval of the Tournament Director. If an operator enters an incorrect move, the Tournament Director must be notified immediately. Both clocks will be stopped. The game must then be backed up to where the error occurred. Clocks will be corrected and the settings at the time when the error occurred will be reinstated using whatever information is available. Both sides may then adjust their program parameters with the approval of the Tournament Director. The Tournament Director may allow certain program parameters to be changed.
- 7. All monitors must be positioned so that the operator's activities are clearly visible to the opponent. An operator may only: [a] enter moves, [b] respond to a request from the computer for clock information, and [c] synchronize the computer clock to the normal chess clock. Misuse of this rule will be punished by the Tournament Director. If an operator needs to enter other information, it must be approved ahead of time by the Tournament Director. The operator may not query the system to see if it is alive without the permission of the Tournament Director.
- 8. A team must receive permission from the Tournament Director to change from one computing system to another.
- 9. Tie-breaking: (a) if precisely two participants are tied for first place, two play-off games of one hour per side are to be played. At the longest, such a match may take four hours. Should that match be drawn, then one sudden death<sup>1</sup> game should be played (White 12 minutes, Black 10 minutes); (b) if more than two participants have an equal number of points, a tie-ranking order is defined as follows. The dominant ranking is by the sum of the opponents' scores. If there is still a tie, the sum of the respective programs' cumulative scores after each round (i.e., score after round-1 + score after round-2 + .... + score after lastround) will be used; (c) the two participants ranked most highly by the tie-ranking order in (b) will then play off as in (a). An analogous tie-breaking procedure applies for establishing the second place and, if necessary, the third place.
- 10. For the play-off procedure for the first place as given in rule 9, the colour assignment is as follows. In the first match game the colours are reversed with respect to the game played in the tournament. In the suddendeath game the following rules apply: (a) if possible, the colour division in the tournament plus the suddendeath game will be equalized. If this is impossible then (b) the colours of the game played in the tournament will be reversed. Play-off procedures for the second (and for the third) place follow the analogous colour-assignment procedure.

## 2013 WORLD CHESS SOFTWARE CHAMPIONSHIP TOURNAMENT RULES

The tournament rules for this championship are the same as for the WCCC with due substitutions and except for the following.

Rule 4 should be read as follows.

The format of the tournament is assumed to be a Swiss-system event with 9 rounds in which the rate of play will be all moves in 45 minutes plus an increment of 15 seconds per move. The increment starts at move 1, i.e., the clock should be used during opening-book play.

<sup>&</sup>lt;sup>1</sup> The outcome of a sudden-death game is defined as follows. Black is the winner unless White wins the game.

### 2013 WORLD COMPUTER CHESS BLITZ CHAMPIONSHIP

The tournament rules for this championship are the same as for the WCCC with due substitutions and except for the following.

- 1. The tournament will be a 9-round Swiss event.
- 2. The time limit for the 2013 World Computer Chess Blitz Championship will be 7 minutes per program per game.
- 3. An operator error (e.g., playing an illegal move) immediately leads to losing the game.
- 4. Hardware problems and network problems are to be remedied in the allotted time frame.

## PRIZE MONEY FOR SHOGI, GO, AND CHESS

### The Board of ICGA

The organisation of the Brain & Mind-Sports Computer Olympiad, the World Computer-Chess Championship, and the Computers and Games Conference (CG2013) is only possible because of external support by The Brain and Mind Sports Foundation. In 2013 we are happy to organize the five events at the Pacifico Center in Yokohama, Japan.

For 2013 the ICGA is pleased to announce that tournaments for three of the games will be endowed with some prize money. The three games are Shogi, Go (19x19 and 9x9), and Chess (the WCCC and the WCSC).

First prize for Shogi will be 1,000 Euro. First prize for each of 19x19 Go and 9x9 Go will be  $\in$  500 Euro. First prize for each of the WCCC and WCSC will be  $\in$  500.

In addition, and in order to encourage the development of computer games programming in Asia, the Shogi and 19x19 Go tournaments will each have second and third prizes as follows:

Second prize	€ 400
Third prize	€ 300

The ICGA wishes to emphasise that such prizes are not guaranteed to be repeated annually, although we do our utmost to make it a tradition.

# THE BRAIN & MIND-SPORTS COMPUTER OLYMPIAD

The Brain and Mind Sports Foundation is enabling the organisation of the Brain & Mind-Sports Computer Olympiad, i.e., the 17<sup>th</sup> Computer Olympiad (CO) (August 12-18), the 17<sup>th</sup> Conference on Computers and Games 2013 (CG 2013) (13-15 August), the 20<sup>th</sup> World Computer-Chess Championship (WCCC) (August 12-18), the 4<sup>th</sup> WCSC, and the 2013 World Computer-Chess Blitz Championship to be held in Yokohama, Japan. Location: the Pacifico Conference center.

The Brain & Mind-Sports Computer Olympiad is the 17<sup>th</sup> in its series. The Computer Olympiad is a multigames event in which all of the participants are computer programs. The purpose is to find the strongest programs at each of the games, partly as an academic exercise and partly because the competitions are fun. In Table 1 we mention 28 different games for which a program can be submitted to the Olympiad.

We are willing to host more games, such as Ataxx, Dvonn, Light up, Mediocrity, Onyx, Tamsk, TwixT, and Zèrtz, but we do not know of the existence of adequately playing programs. We are awaiting suggestions and proposals of programmers before we include them in the official list given in Table 1.

For each game, a tournament will take place provided that at least two programs enter the tournament for that particular game. Gold, Silver and Bronze medals will be awarded to the leading programs in each tournament.

Abalone	Go
Amazons	Go 13x13
Arimaa	Go 9x9
Backgammon	Hex
Bao	Kriegspiel
Bridge	Lines of Action
Chinese Chess	Nonogram
Clobber	OCTI
Computational Pool	Othello
Connect 6	Phantom Go
Diplomacy	Poker
Dominoes	Scrabble
Dots and Boxes	Stratego
10x10 Draughts	Shogi
Gipf	Shogi 5x5
	Surakarta

Table 1: Games played at the Computer Olympiad.

The Tournament Director of the Computer Olympiad will be: H.J. van den Herik. The envisaged Assistant Tournament Directors are: H. Iida and H. Matsubara (Go), A. Plaat (other games). The ICGA head quarters organizers are: J.W. Hellemons and H. Iida.

The local arrangement committee:

H. Matsubara (chair), Computer Go Forum President;

T. Takizawa, Computer Shogi Association President;

T. Ito, IPSJ SIG-GI chair;

S. Asakura, secretariat.

The entry fees for the Olympiad tournaments are as follows: Amateur:  $\notin 25$ Semi-professional:  $\notin 100$ Professional:  $\notin 250$ 

When subscribing for more than one Go or Shogi tournament you pay for one tournaments, the others are then for free.

A participant is expected to be ICGA member ( $\notin$  40). Deadline early registration: June 30, 2013. Any entry received after June 30, 2013 will be subject to a penalty fee, doubling the above fee. Website: www.icga.org and http://www.grappa.univ-lille3.fr/icga/event\_info.php?id=42.