FIDE/ACP Anti-Cheating Committee

Proposal – FIDE Congress 2014

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Introduction

In the past few years, the rapid development of information and communication technology has resulted in a limited number of well-identified instances of computer assisted cheating, and also in an increased perception by the general public of the vulnerability of chess. FIDE and the Association of Chess Professionals jointly identified this as a major cause of concern for the credibility of chess. To put it in simple terms, no one wants to be associated with a sport whose results can easily be affected by computer-assisted cheating. Accordingly in mid-2013 FIDE and the ACP set up the joint "FIDE/ACP Anti-Cheating Committee".¹

While the Committee was also asked to look at more traditional areas of malfeasance (such as rating fraud, fictitious tournaments and result manipulation), it was soon agreed to focus on fighting computer-assisted play as the most important perceived threat to the integrity of chess. Of course, the Committee retains jurisdiction on the above-mentioned areas as well, but it will deal with them at a second stage of its development, since the current Rules of Chess are deemed to be sufficient to fight these frauds. Computer-assisted cheating has priority both in its threat, and in needed additions to the Laws of Chess and competition policies. Both FIDE and the ACP recognize the importance and urgency of this work.

This document contains the first set of recommendations from the Committee. The first and most important recommendation is that FIDE establish a permanent Anti-Cheating Commission (ACC). The Commission shall operate with a view to prevent instances of cheating and to avoid the spreading of the related plague of false accusations. In order to achieve this result, it shall:

- i) monitor and constantly improve the anti-cheating system and regulations;
- ii) perform sample checks on players and tournaments both on-site and remotely;
- iii) receive complaints;
- iv) investigate and decide on open cases;
- v) make recommendations to other FIDE Commissions and propose changes to the Laws of Chess, Tournament Regulations, Rating Regulations and Title Regulations.

The Committee also recommends new procedures for the reporting and investigation of suspected cheating incidents. These recommendations have been developed by involving other FIDE Commissions where needed, such as WCOC, Rules and Tournament Regulations, Qualifications, Ethics, Events and Arbiters. In some cases action has already been taken by these Commissions in the area of anti-cheating, and these changes have been noted in this report.

¹ The paper has been prepared by Klaus Deventer, Laurent Freyd, Yuri Garrett, Israel Gelfer (Chair), Konstantin Landa, Shaun Press and Kenneth Regan and is the result, among many other interactions and meetings within the Committee, of two seminal meetings in Paris (Oct. 2013) and Buffalo (Apr. 2014). Valuable contributions came from other members of the Committee, such as Nick Faulks, Miguel Illescas and George Mastrokoukos, and external experts such as Andrea Griffini, Bartlomiej Macieja, Takis Nikolopoulos, and Emil Sutovsky. All names are in alphabetical order only.

The Committee recommends the implementation of a FIDE Internet-based Game Screening Tool for pre-scanning games and identifying potential instances of cheating, together with the adoption of a full-testing procedure in cases of complaints. Together they shall meet the highest academic and judicial standards, in that they have been subject to publication and peer review, have a limited and documented error rate, have undergone vast empirical testing, are continuously maintained, and are generally accepted by the scientific community. Once in place, the Internet-based Game Screening Tool will be accessible to arbiters and chess officials and will be a useful instrument to prevent fraud, while the full test procedure will adhere to greater privacy as managed by FIDE and ACC.

The document will also present a set of recommendations for arbiters and for the Arbiters Commission, the most important of which is recourse to Continuous Training. The intended purpose of the recommendations is to prepare arbiters to adapt to the changes introduced by the new Anti-Cheating framework.

Lastly, the Committee wishes to share with the General Assembly and FIDE Officers the notion that the task it has been assigned is very sensitive and extremely complicated, and one where no previous skill has been acquired by FIDE – or indeed any other party. While the Committee feel that the proposed regulation will contribute to tackle cheating and reinforce confidence in all interested parties, it also understands that future adjustments will be needed to fine-tune the system in the light of the experience of the first period of operation. Also, the changing environment in which the Anti-Cheating Committee will be operating calls for necessary prudence. Thus, the outcomes of the present proposal shall need constant monitoring and possibly a thorough revision in the course of the next few years.

Hopefully, the Committee has provided FIDE with a carefully balanced starting point for developing a comprehensive anti-cheating framework that will prove increasingly successful in assuring long lasting confidence to the game of chess.

Introduction

The ACC recognizes that computer-assisted cheating poses a major perceived threat to the integrity and credibility of chess, and that immediate action is required to adjust the existing Laws of Chess and Regulations accordingly.

While the ACC believes that cheating is not as widespread as one could think, it also acknowledges the prime importance of assuring that the players, the public, the sponsors, and all other stakeholders perceive the game as clean. In order to achieve this goal a common effort by chess officials/regulators, players, and arbiters is required. Chess officials need to rank anti-cheating efforts high in their priorities; players need to give up part of their convenience and privacy to protect their own interests; and arbiters need to acquire a more pro-active attitude to their role and duties.

Changes shall be introduced to the Laws of Chess and to the FIDE Statutes with a view to introducing the possibility of personal searches during tournaments, to set up and empower the Anti-Cheating Commission, and to empower and train arbiters to tackle cheating.

Rather than focusing on the definitions of "cheating" and "cheater", the ACC opted for a criterion-driven legal approach. Efforts will be centered on ensuring a fair and level playing field by developing a clear set of rules designed to reassure players during play. This document outlines criteria for player behaviour that prevent all known ways of computer-assisted cheating, and sets statistical criteria for identifying deviations beyond almost all normal play. While these rules will make it more difficult for prospective cheaters to carry out illegal plans, a second set of measures will be adopted for both on-site and remote screening of games by means of sophisticated statistical tools, and procedures will be put in place to match the findings of the statistical analysis with on-site observations.

Lastly, a set of sanctions, both discretionary and automatic, both on-site and ex-post-facto, will be developed.

This new anti-cheating framework will thus result in recommended changes to the Laws of Chess, recommendations to arbiters, the setting up of a permanent FIDE Commission, and the establishing of a prosecuting and judgment process for anti-cheating matters.

Scope

Recommendations from this Committee are intended to cover all FIDE-rated events. However the Committee recognizes that there are substantial differences between different types of events, and has therefore identified three categories of tournaments:

(A) Events that require maximum levels of protection

- i) All official FIDE Events as defined in the FIDE Handbook Section D;²
- ii) FIDE Junior and Youth events;
- iii) Round-robins with an average rating of 2600 or more (2400 for Women's events);
- iv) Top-tier National Individual and Team Championships.³

(B) Events that require increased levels of protection

- i) Open tournaments with prize funds in excess of EUR 20.000;
- ii) Official Junior and Youth events organized by National Federations;
- iii) Round-robins with an average rating of 2400 or more (2200 for Women's events);
- iv) Medium-tier National Individual and Team Championships.

(C) Other FIDE-rated events that require standard levels of protection

Anti-cheating measures will vary across categories in order to take account of the different economic impact of such measures, as well as appeal to the players likely to take part. The list of measures is specified under "Prevention" below.

With a view to creating a sufficient unbiased database of games and to make statistical analysis even more accurate, all games played after 1.1.2012 are subject to potential screening by the ACC. This will enable AC statistical analysis to apply to a wider sample of games, 18 months prior to the announcement of the establishment of the FIDE/ACP ACC. Any player coming under investigation for games played after the entry into force of the AC regulations will be potentially subject to screening of his earlier games going back to 1.1.2012 and results and titles obtained after that date can be subject to revision and sanctions, including revocation of title.

Games played on or before 31.12.2011 will not be subject to the jurisdiction of the ACC.

Prevention

The FIDE Laws of Chess that are expected to enter into force on 1 July 2014 introduce new provisions explicitly forbidding the use of external information during a game. Specifically:

11.3.a During play the players are forbidden to use any notes, sources of information or advice, or analyze any game on another chessboard.

² The ACC recommends to the Rules and Tournament Regulations Commission that special attention be paid to regulations for A-Type Team tournaments, such as the Olympiads or the European Club Cup, where the Captains should be considered as an integral part of the team and therefore should not be allowed to leave the playing venue.

³ Top, Medium and Lower-tier National Individual and Team Championships shall be determined by FIDE on the basis of considerations associated with the development of chess in each individual country. The break-down shall be published by the ACC under the form of a list and made publicly available.

The Laws also explicitly forbid electronic devices:

11.3.b During play, a player is forbidden to have a mobile phone and/or other or other device capable of processing or transmitting chess analysis⁴ in the playing venue. If it is evident that a player brought such a device into the playing venue, he shall lose the game. The opponent shall win. The rules of a competition may specify a different, less severe, penalty.

They also empower the arbiter to ensure that the above rule is adhered to:

The arbiter may require the player to allow his clothes, bags or other items to be inspected, in private. The arbiter or a person authorized by the arbiter shall inspect the player and shall be of the same gender as the player. If a player refuses to cooperate with these obligations, the arbiter shall take measures in accordance with Article 12.9.

Tournament organizers are also free to introduce their own regulations and conditions for events, provided they are in accord with the Laws of Chess.

In the light of the above premises, the Committee feels that 3 levels of protection are desirable:

Maximum protection

- Organizers clearly and carefully designate areas for players (the "Playing Area") and for spectators. Organizers and arbiters shall prevent getting any chess information from outside the "Playing Area". Organizers shall try, in so much as possible and reasonable, to avoid contact between players and spectators. If possible provide separate refreshment/toilet/smoking areas for players and spectators.
- Arbiters should remind players of the existence of the new AC regulations.
- Tournaments that are found not to materially comply with AC requirements shall not be rated.
- Organizers and arbiters are encouraged to carry out regular screening tests via the FIDE Internet-based Game Screening Tool
- Integral application of Law 11.3.b. In case of breach, the arbiter shall take measure in accordance with article 12.9.f and forfeit the player.
- Additional security in the form of ACC-certified metal detectors/x-ray machines, scanners, electronic jamming devices, manned by qualified security staff, subject to applicable restrictions in each individual jurisdiction. Each tournament should adopt at least one measures from the ones listed in Annex D. The list is to be adjourned on a time-to-time basis by the ACC.
- Obligation to send in all tournament games in pgn format for screening (only recommended for Rapid and Blitz events).
- Tournament Director and all arbiters need to be "Anti-Cheating Educated".
- Obligation to present the AC Form at least 4 weeks before the start of the tournament (or as otherwise specified in Paragraph 02 of then current FIDE Rating regulations).

Increased protection

⁴ The Committee recommends that the current wording of this paragraph be changed from "electronic means of communication" to "other device capable of processing or transmitting chess analysis".

- Organizers clearly and carefully designate areas for players (the "Playing Area") and for spectators. Organizers and arbiters shall prevent getting any chess information from outside the "Playing Area". Organizers shall try, in so much as possible and reasonable, to avoid contact between players and spectators. If possible provide separate refreshment/toilet/smoking areas for players and spectators.
- Organizers are strongly encouraged to provide for secure storage facilities for electronic devices.
- Arbiters should remind players of the existence of the new AC regulations.
- Tournaments that are found not to materially comply with AC requirements shall not be rated.
- Organizers and arbiters are encouraged to carry out regular screening tests via the FIDE Internet-based Game Screening Tool
- Additional security in the form of metal detectors/x-ray machines, scanners, electronic jamming devices, manned by qualified security staff, subject to applicable restrictions in each individual jurisdiction. Each tournament should adopt at least one measure from the ones listed in Annex D. The list is to be adjourned on a time to time basis by the ACC.
- Obligation to send in norm-related tournament games in pgn format for screening.
- Recommendation to send all games in pgn for screening
- Tournament Director and 50% of all arbiters need to be "Anti-Cheating Educated"
- Obligation to present the AC Form at least 4 weeks before the start of the tournament (or as otherwise specified in Paragraph 02 of then current FIDE Rating regulations);
- Law 11.3.b will be adopted in a milder version to take account of the circumstance that many amateur players will take part in a tournament after work or other social activities. It may become inconvenient or impossible for them to leave all devices out of the playing venue. The ACC therefore recommends to adopt the following rule⁵:

"In tournaments open to amateur players, the prohibition to introduce electronic devices in the playing venue may, and indeed should be waived. However, under no circumstances a player shall be allowed to carry an electronic device, whether switched on or off, working or not, on his body during play. This includes, but is not limited to, carrying a device in a bag or in the pocket of a jacket. Any player found carrying such a device shall immediately be forfeited his game, with rating points calculated. A second offense during the same tournament shall imply an immediate ban from the tournament, with the player's name forwarded to the ACC for further investigation.

Standard protection

- Arbiters should remind players of the existence of the new AC regulations.
- Organizers clearly and carefully designate areas for players (the "Playing Area") and for spectators. Organizers and arbiters shall prevent getting any chess information from outside the "Playing Area". Organizers shall try, in so much as possible and rea-

⁵ Please note that this may require substantial changes in the Laws of Chess. The Committee strongly suggests that these changes be adopted before July 1 2014.

sonable, to avoid contact between players and spectators. If possible provide separate refreshment/toilet/smoking areas for players and spectators.

- Recommendation to use security equipment (1 item)
- Recommendation to send all available games in pgn for screening
- Tournament Director needs to be "Anti-Cheating Educated"
- Law 11.3.b will be adopted in a milder version to take account of the circumstance that many amateur players will take part in a tournament after work or other social activities. It may become inconvenient or impossible for them to leave all devices out of the playing venue. The ACC therefore recommends to adopt the following rule:

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Organizers of A and B-type events may liaise with the ACC with a view to finding adequate AC measures that are tailored to the tournament's size and budget. The ACC's decision following contact by the organizers is final.

On-Site Inspections

The ACC Chair shall be vested with the power to perform on-site inspections at any FIDE-rated event. The ACC Chair shall also be entitled to empower any other ACC Member to perform inspections on behalf of the ACC. The costs associated with all ACC inspections shall be borne by FIDE. Inspections by the ACC may be incognito.

The FIDE Internet-Based Game Screening Tool

FIDE will supply organizers and arbiters with an Internet-based Game Screening Tool that will be accessible to all authorized FIDE officials (IO, IA, ACC members) and National Federations.

The Internet-based Game Screening Tool shall be hosted on a FIDE-dedicated webpage and will enable authorized parties to upload games in pgn format for a "fast test" that will identify potential outliers in the tournament - i.e. players whose performance is far above their expected level and potentially compatible with computer-assisted play.

The results of the "fast test" are to be kept confidential and are only meant to assist the Chief Arbiter in identifying cases that may call for further measures to assure that players are adhering to the rules. If requested, the ACC shall provide assistance to the Chief Arbiter in determining such measures. It should be reminded that only a "full test" can confer reliable statistical evidence on whether the outlier is receiving external help, so that the results of the "fast test" are not applicable for judgments of complaints.

The Internet-based Game Screening Tool will require the following investment from FIDE:

- i) a multi-processor computer capable of processing a very high number of games per hour;
- ii) adequate storage capacity;
- iii) a dedicated user-friendly Internet-based Graphical User Interface;
- iv) a specific certified software for processing games approved by the ACC;
- v) instructions for use (administrators and end users);
- vi) one or more system administrators;
- vii) a password system for limiting external access;
- viii) a contract with a provider of server facilities;
- ix) ordinary and extraordinary software maintenance at all times.

Such hardware will also suffice to run full tests monitored by the ACC

Section 2 - Complaints

Handling complaints is a sensitive phase of the anti-cheating effort. The ACC acknowledges that a proliferation of complaints from players is not desirable. In order that complaints be grounded on direct evidence rather than hearsay, the ACC undertakes to formulate requirements that must be met by anyone submitting an allegation of cheating by computer assistance. This applies both for the in-tournament and the post-tournament complaint procedures itemized here, while the ACC also proposes that a sanction system be put in place to deter serial submission of unfounded accusations.

For these reasons during a tournament the arbiter shall have a duty to record each and every allegation of cheating by a FIDE-rated player meaning that players cannot "informally" tell an arbiter that they suspect that another player is cheating. This also applies to any other person having a FIDE Identity Number. All cheating-related communications shall be duly recorded by the arbiter and subsequently filed to the ACC.

Part A: In-Tournament Complaints

Potential cheating incidents may be observed during play directly by a tournament arbiter. They can also be reported to the arbiter by a player, a spectator or, indeed, the ACC (e.g., based on statistical analysis or on-site inspection).

If the report is based on possible breaches of Article 11.2 or 11.3a, then the arbiter shall investigate the breach in the usual manner, with reference to Article 12.9 for possible penalties.

If the complaint is specifically about possible cheating, then the Chief Arbiter shall, in the first place, identify the complainant and invite him to fill out a Complaint Form (Appendix A). The complainant shall provide to the arbiter the reasons why the complaint is being made, and shall sign the form on completion. However, if the complainant is tense, the arbiter shall record the name of the complainant and ask for his signature, and only at a later time ask him to fill in the form, but no later than the end of the round.

Upon receiving a complaint, the arbiter shall take steps to investigate it, whenever possible in coordination with the ACC, using his/her judgment in how this investigation is to be carried out. Any additional information that the arbiter gathers shall be added to the report.

The report shall be forwarded to the FIDE Office at the completion of the tournament, who shall pass it on to the ACC. All information in the report shall remain confidential until an investigation is completed by the ACC. In case of breach of privacy requirements before the investigation is completed, the ACC reserves the right to publicize the details of the investigation and shall refer all offenders to the Ethics Committee.

On completion of the investigation the ACC shall issue an official report, explaining its process and decisions.

If the complaint is manifestly unfounded, the complainant can receive a warning by the ACC, whereupon his name will be added to a special "Warning database" maintained by the ACC. Upon receiving a second warning within a period of six months, the complainant shall be sanctioned (three months suspension for first violation, six months suspension for second violation).

Part B: Post Tournament Complaint

Potential cheating may also be reported after a tournament has been completed, based, for example, on new findings (e.g. confessions, statistical evidence). In general, a Post Tournament Report should be based on very substantial evidence, and complainants are required to illustrate their case in great detail for the ACC to actually consider it. PTRs can be filed only by interested parties such as players, Federations and chess officials. The ACC may also open a case based on its own post-tournament findings.

The complainant shall submit a Complaint Form (Appendix B) to the ACC. The complainant shall list the grounds for the complaint, including any statistical analysis that may have been carried out to support the claim, specifying all direct and circumstantial evidence he/she may have collected.

All information in the PTR shall remain confidential until an investigation is completed by the ACC. In case of breach of privacy requirements before the investigation is completed, the ACC reserves the right to publicize the details of the investigation and will refer all of-fenders to the Ethics Committee. On completion of the investigation the ACC shall issue an official report, explaining its process and decisions.

If the complaint is manifestly unfounded, the complainant can receive a warning by the ACC, whereupon his name will be added to a special "Warning database" maintained by the ACC. Upon receiving a second warning within a period of six months, the complainant shall be sanctioned (three months for first violation, six months for second violation).

Section 3 - Investigation

Investigation of alleged cheating incidents shall be started:

- i. By an in-tournament report from the Chief Arbiter/ Organizer of a tournament;
- ii. By a post-tournament report; or
- iii. As a result of self-originated investigation by the ACC.

Each investigation will be carried out by an investigating Committee appointed by the ACC, known as the Investigating Committee (IC). The IC shall be formed on a case-to-case basis.

The IC shall look at both the physical and observational evidence presented in the report. They will also look at the statistical evidence gathered as part of the investigation. They can also gather additional evidence in the course of their investigation, for example by running statistical tools or requesting additional information from the tournament organizers/arbiters or the players.

The IC shall investigate each and every case within a maximum of 60 days from the receipt of the report. If the investigation by the IC supports the claim of alleged cheating, the IC shall submit its report to the ACC who will be convened as a matter of urgency and called to vote upon the IC report within 7 days from receiving the report.

To assist the ACC in performing post-tournament analysis, the Committee recommends that the FIDE Qualification Commission require:

- The submission to ACC of complete game files for Type A events; for National Individual and Team Championships, this provision shall only apply where possible.
- The submission to ACC of complete game files of the first three classified of World and Continental FIDE Youth and Junior events;
- The submission to ACC of complete game files of players earning title norms in all events.

Norms shall be considered valid only after applicant has provided the ACC with a pgn file containing all games in the relevant events. Title applications shall be accompanied by a pgn file containing all games of all events in which norms were scored and the relevant file transmitted to the ACC.

Section 4 - Judgement

Given the need to end the anti-cheating procedures in as little a time as possible, the Committee feels that it is appropriate that the FIDE ACC be the body that imposes first-degree sanctions. This is in the interest of the players, who will then be entitled to an equally fast appeals procedure.

The system of sanctions

When the ACC approves the report of any individual IC, all offenders shall be subject to sanctions for violating anti-cheating regulations.

The ACC recommends the following sanctions:

1st Offense – up to 3-year suspension from all FIDE rated events (up to 1 year if the defendant is under the age of 15 years at the time of the offence; up to 2 years if the defendant is under the age of 18 years at the time of the offence)
2nd Offense – up to 15-year suspension from all FIDE rated events.⁶

For events where breach of anti-cheating regulations has been proven (either immediately after the end of the appeals procedure or upon waiver of appeal by the defendant) the Committee recommends that the FIDE Qualifications Commission take the following action:

- In a individual Round Robin event, all games by the offender shall be counted as having been lost and rated. The tournament shall remain valid for norms.
- In an individual Open Tournament, the offender shall be excluded from the final ranking. His opponents shall be considered to have won the game against him for rating purposes, but their results in already-completed games shall not be changed in the tournament ranking.⁷
- Any title norms achieved by the offender shall be disregarded;
- In Team events all games by the offending players shall be declared as lost for rating purposes and rating points calculated accordingly.⁸

In case the offender has received a prize, he/she shall immediately return the prize to the tournament organizers. Failure to do so shall be considered as a second violation of anti-cheating regulations and lead to immediate sanctioning.

Where a player is found in breach of AC regulations, he shall be subject to revocation of all

⁶ Currently the maximum suspension that can be handed down by the FIDE Ethics Commission is 3 years. The Committee recommend that the FIDE Statutes be changed to allow the Ethics Commission to hand down the penalties recommended above.

⁷ Currently the QC does not have the power to refuse the rating of individual games. The Committee recommend that the Rating Regulations be changed to give the QC this power.

⁸ The implications of a player being in breach of AC regulations in team events are to be sorted out by the Tournament Regulations or by the relevant body having jurisdiction.

his FIDE titles and norms by the General Assembly.

Effects of judgment; appeals procedure

Sanctions issued by the ACC on the grounds of an IC report are immediately effective. Sanctioned players can request an appeal within 30 days of the publication of the final ACC report to the FIDE Office according to the procedures set out in Section 4.4 of the current Code of Ethics. If such an appeal is filed, then the ACC shall forward the results of this investigation to the FIDE Ethics Commission and the FIDE Ethics Commission shall hear the case and render judgement in accordance with its own statutes, but in any case within 45 days of the defendant's request or 75 days from the initial ACC report, whichever is latest. On the 76th day, in the absence of a judgement by the Ethics Commission, the defendant shall be deemed to have won the appeal.

A player who is handed a suspension of 5 years or more may apply for reinstatement after 5 years from the date of the suspension, and every 5 years after that. Applications for reinstatement are to be heard by the FIDE Ethics Commission.

Publicity

Currently-suspended players shall be excluded from the published FIDE Rating List and invisible from the FIDE website. It is the Arbiter's duty to check that all players wishing to compete in an event are not subject to AC sanctions.

A tournament listing any player who is excluded from the FIDE Rating List based on AC sanctions will not be rated and any title norm awarded in the tournament shall be disregarded.⁹

A player who knowingly enters a tournament while suspended as a consequence of an AC ruling shall be deemed to have committed a second offense.

⁹ The ACC recommends that the QC implement a system for displaying the current status of a sanctioned player in the Player Database, for example by adding a sanction flag to be displayed for the period the player is suspended. The Player Database shall record the initial and final period of the sanction for each player, but not display it.

The FIDE/ACP Anti-Cheating Committee recommend the formation of a permanent FIDE Commission called the FIDE Anti-Cheating Commission.

Members and Chair

The Commission should consist of 7 members which will be appointed every 4 years. The composition of the Commission shall be as follows:

- Three (3) members of the commission shall be recommended by FIDE;
- Three (3) members of the commission shall be recommended by the Association of Chess Professionals (ACP);
- One (1) member is required to be a technical expert in the area of computer based cheating and shall be jointly nominated by FIDE and the ACP.

The Commission Chair shall be recommended by the FIDE President, and approved by the FIDE General Assembly.

Scope

The Commission shall be responsible for defining the regulations concerning anti-cheating in Chess. Where necessary the Commission shall make recommendations to other Commissions concerning this topic and propose changes to the Laws of Chess, Tournament Regulations, Rating Regulations and Title Regulations.

The Commission shall have the power to carry on-site inspections at any FIDE-rated events.

The Commission shall be responsible for investigating incidents of cheating, as defined in Section 2 of this report, and to issue first-degree sentences.

Operation

The Commission shall meet physically at least once a year to review and possibly amend its regulations. The Commission shall also publish annual reports on its activities, including statistics on the number of cheating cases investigated and found to be proven/ unproven.

Section 6 – Recommendations for Arbiters

The adoption of ACC regulations will require a substantial effort to FIDE and its arbiters. In particular, the role of arbiters in chess will need to be rethought, and the resulting shall be the product of close interaction between the ACC and the Arbiters' Committee.

Continuous Training

The ACC also feels that Continuous Training is desirable for all FIDE-Titled arbiters. In the medium term, it is highly desirable that the ACC, together with the Arbiters' Commission, will organize special Anti-Cheating Training Sessions aimed at FIDE-titled arbiters, so that only arbiters who will attend and pass these training sessions will be eligible for A-Type tournaments starting from 1.1.2016. If a FIDE-titled arbiter omits to fulfill his/her Continuous Training obligations, he/she shall lose his status as an active FIDE-titled arbiter. Since it is clear that setting up this system will require close interaction between the ACC and the Arbiters' Commission, and that the resulting regulations will require some time to be developed¹⁰, the initial requisite for all FIDE-titled arbiters to be considered as "Anti-Cheating Educated" will be to acknowledge full awareness of the Anti-Cheating Regulations and these Recommendations. A special form and/or procedure will be prepared to this effect and, starting 30 Sept. 2014, only arbiters in keeping with this requisite shall be considered "Anti-Cheating Educated".

Initial Recommendations

While waiting for the new training system to be developed, the ACC wishes to issue the following initial recommendations for arbiters. It should be understood that if an arbiter feels he needs support from the ACC, he is strongly encouraged to get in touch with the Commission to obtain consultancy about a particular situation.

1. How players can cheat during the game

- An arbiter should know how a cheater typically acts and which devices are used for cheating. Typically, a player can cheat by: i) accepting information by another person (spectator, captain, co-player, etc.); or ii) getting information from any source of information or communication (such as books, notes, etx or any electronic device). It the arbiter's his duty to take care of situations indicating suspect cheating during the entire duration of the round.
- Often a cheater is using a mobile phone hidden in a pocket. This is forbidden ac-

¹⁰ In the long term, it is desirable that the Arbiters Commission and the ACC jointly develop educational materials for arbiters such as: videos with staged scene of cheating process and explanations; case studies about well-known cases of cheating; an arbiter's guide to the FIDE' Internet-Based Game Screening Tool; a full set of examination questions to be asked at the end of each ACTS.

It is also desirable that the ACC and the Arbiters Committee jointly develop Guidelines for the collection and verification of physical and observational evidence, in order to assist arbiter in their day-to-day fight against cheating.

cording to Art. 11.3b of the laws of chess. To find hidden mobile phones and other electronic devices the use of hand-held metal detectors and other equipment (see Annex D) is highly recommended in all tournaments. Arbiters should exercise caution and delicateness in asking for and carrying out a check with hand-held metal detectors. If a metal detector gives a signal it is important to clarify the reason, if necessary by an inspection of the player and his belongings as described in Art. 11.3b of the Laws of Chess.

2. Which precautions can be taken to prevent cheating

- The Arbiter must have a discreet control of the players that are leaving the playing area very often, for their contact with other players, spectators and other persons, according to Article 12 of the Laws of Chess.
- The arbiter should be aware that in some cases a cheater gets information by a third party. The arbiter should prevent any contact between players and spectators such as talking and/or giving/receiving signals.
- The arbiter should never tolerate the use of chess programs in the playing venue. In case he should detect a player using a chess program he should immediately inform the Chief Arbiter.
- Organizers are free to assign extra arbiters to the specific task of preventing cheating.
- During a tournament, the arbiter is encouraged to use the FIDE screening tool with pgn games, since that tool can show suspicious cases (subject to full test verification with the upport of the ACC) or, more likely, show that a player is not to be considered suspicious based on his games.

3. Screening games for precaution and information

- During a tournament, the arbiter is encouraged to compile games in PGN format and submit them to the FIDE screening tool. This is not a cheating test and gives no statistical judgment, but its information is useful to have beforehand in case any suspicions are voiced or situations may be developing.
- In early rounds (such as 1-3 of a 9-game event) there will always be outliers because the total number of relevant moves is small, but any cheating player will likely be among them.
- In middle rounds, honest outliers will tend to "regress to the mean", while records of some past cases show now-sanctioned players having become more obvious. Trials have shown it possible by this time to be confident in the absence of statistical ground for suspicion against any player.
- On the other hand, a persistent outlier may be ground for contacting ACC, calling for a full statistical test, and for "unobtrusive" actions such as increased watchfulness of a player.
- The screening tool will provide tables with guidelines based on players' ratings for gauging the magnitude of outliers. For instance, 67% matching is more "normal" for 2700-players than for 2300. Again only the full test can give any kind of judgment.¹¹
- See Appendix C for more on screening and full-test procedures and interpretation.

¹¹ For example, the full test might show that the 2300-player had such forcing games that his/her baseline is 60% rather than the usual 50-51%. Then 67% versus 60% is a much less significant deviation.

3. How to deal with suspicious behavior

- In case of a suspicious player's behavior the Arbiter must always follow the player on his way out of the playing venue (to the bar, toilets, smoking area etc.), in order to avoid any contact of the player with other persons and any use of sources of information or communication.
- In multiple cases, there has been use of mobile phones in the toilet. Therefore the arbiter should note how often a player leaves the playing area and if this is significant take appropriate measures trying to find out the reason.

4. How to deal with the new Article 11.3 of the Laws of Chess

- The arbiter may require the player to allow his clothes, bags or other items to be inspected, in private. The arbiter, or a person authorized by the arbiter, shall inspect the player and shall be of the same gender as the player.
- Usually the arbiter will inspect a player as described in Art. 11.3b of the Laws of Chess only in case of suspicion of cheating or after receiving an official In-Tournament complaint (cfr. Section 2), but only if he comes to the conclusion that the complaint is not evidently unfounded. If he decides to make an inspection on whatever grounds he is not obliged to give the player a special reason, however he should be calm, polite and discreet. The inspection of a player should be carried out in a separate room by a person of the same gender. Only this person, the player and one witness (also of the same gender) may have access to this room during the inspection. The player is entitled to select a second witness of his own choice.
- If there is no matter of urgency, the inspection of a player and his belongings should generally be carried out before or immediately after the end of the game. Still, the arbiter should be aware that it is possible to hide the electronic devices somewhere in or near to the playing venue as also to give them to a third party shortly before the end of the game. The arbiter has also the right to check the player, who decided to leave the playing venue or upon request of a player who filed an In-Tournament complaint, but only once during the round.
- If a player refuses to be inspected it is advised that the arbiter explains the rules to him. If the player still refuses he shall get a warning. If he still refuses to submit to an inspection he shall lose his game.
- Random inspections should be announced in the rules of the competition in advance.

5. How to deal with accusations

- The procedure how to deal with accusations is described under Sec. 2 Part A. If any FIDE-Identified person presents an accusation of cheating, the arbiter should ask him/her to make an official In-Tournament complaint. In case of refusal, the arbiter shall make a remark in the tournament report and annotate the person's name as having presented a cheating accusation. In this case the accused player shall not be informed by the arbiter. If the arbiter receives an In-Tournament complaint he can inform the accused player after the end of his game and ask him for comment.
- The arbiter should mention in his tournament report any In-Tournament complaints and inspections, if any, specifying the result of each action.

6. How to deal with false accusations.

- In case of a false accusation by a player the Arbiter shall penalize him according to the Article 12.2 of the laws of Chess. For further procedures see Section 2 Part A.

Annex A - Tournament Report Form

Federation	Name of Tournam	Name of Tournament			
Venue	Start Date	End Date			
Chief Organiser					
Chief Arbiter					
Complainant (include FIDE ID if applicable)					
Player Details (include FIDE ID)					
Complaint details					
Arbiter comments					
Complainant Signature					
Arbiter Signature					
, , , , , , , , , , , , , , , , , , ,					
Date					

Annex B - Post Tournament Report Form

Federation	Name of Tournament				
Venue	Start Date		End Date		
Chief Organiser	11				
Chief Arbiter					
Complainant (include FIDE ID if applicable)					
Player Details (include FIDE ID)					
	,				
Check with program (Y/N)		Program Name	e:		
Analysis file provided (Y/N)					
		Hardware:			
Description of check/results:					
Arbiter comments					
Complainant Signature					
Arbiter Signature					
Date					

Annex C: Statistical Method

I. Methods and Levels of Testing

The Committee recognizes two levels of statistical analysis. They are general and not reserved to any one provider or methodology.

(1) Screening Tests. These will generally check all available games from a tournament, in-progress or afterward. They can be routinely provided to the Chief Arbiter, at his/her discretion, by a web server in reasonably quick time (the FIDE Internet-Based Game Screening Tool).

- A. If an allegation is made either formally or publicly, a screening test <u>shall</u> be done. Even if it is against only one player, all available games should be screened to give context.
- B. A screening test in response to an allegation either results in calling for a full test of games involving one or more players, or results in dismissal of the allegation.
- C. Screening test results do not represent primary statistical evidence in support of any allegation only a full test can.
- D. Calling for a full test based on screening results is the CA's decision.

Guidelines to arbiters on considerations in deciding whether screening results call for the effort of a full test are under arbiter recommendations.

(2) Full Tests. These must meet the following criteria:

- A. They must provide one or more recognized statistical tests of a null hypothesis, backed by peer review and appropriate empirical testing of the test statistics.
- B. They must incorporate more extensive game analysis than screening tests.
- C. They must be human-supervised, in co-ordination with ACC, including a second party conducting a test with different analysis engine(s) from the first.
- D. The tests should measure specific criteria, such as move-matching to the engine(s) (MM) or average difference from optimality (AD), so that a positive result has more specific meaning than "this person played unbelievably well."

The ACC shall designate a statistical procedure that meets these criteria. The approved procedure shall be subject to periodic review.

II. Procedure for Using Statistical Results

Per requirement A of the full test, it should provide a so-called *p-value*, which represents the probability of a deviation at or exceeding what is observed given that the null hypothesis is true, that is in the event of "normal play." For tests under normal distribution the *p*-value is

commonly derived from a *z-score*, which is expressed in units of standard deviations called *sigmas*. The ACC does not simply use either the standardly-recognized "5% threshold" or "1% threshold" for significance of *p*-values, but rather demands more stringent thresholds depending on the absence or presence of other evidence, the size and nature of the tournament, and the circumstances of the complaint. The following guidelines are recommended:

- A. A *z*-score under 2.00, commonly regarded as failure to pass the 5% threshold, may be considered a finding that statistical evidence does not support a complaint.
- B. A *z*-score of 2.75 or greater, representing a 0.3% threshold, may constitute strong supporting evidence in the presence of physical or observational evidence.
- C. Higher thresholds may be deemed needed for further stages of a FIDE-level judicial process.
- D. For statistics to be considered as sole evidence for judgment, a *z*-score of at least 4.75 (p = .0001% or 1-in-a-million threshold) is needed, from one event or as a combined *z*-score from several events in close succession.

For comparison, the scientific standard for declaring new components of Nature such as the Higgs particle or gravity waves to exist is $z \ge 5.00$. Based on the volume of recorded chess games, even if full tests were done on every game by every player, a $z \ge 4.75$ would be observed in normal play only once every 20 years, and $z \ge 5.00$ once in 60 years.

When a full test is conducted in response to a formal complaint, the results shall be included in the report on the complaint. A full test performed at the CA's discretion when there is no allegation is private. Test results may also warrant overt measures taken by arbiters onsite, such as increased watch, searches, changes in game locale or environment, subject to considerations in other parts of this document.

Annex D - Equipment

The following technical equipment shall be adopted by the Tournament Direction to contrast potential cheaters in A-type tournaments. The actual equipment to be adopted shall be agreed between the ACC and the Tournament Direction on a case-to-case basis.

- Mobile phone jammers;
- Hand-held security metal detectors
- Walk-through metal detectors
- Automatic electro-magnetic screening devices for metallic/non-metallic items
- Closed circuit cameras

In most cases, a hand-held metal detector will prove enough to secure that electronic devices are not being carried into the playing venue, and should thus always be considered as the first-choice device. The actual equipment to be adopted shall be agreed between the ACC and the Tournament Direction on a case-to-case basis.

FIDE is entitled to buy extremely sophisticated anti-cheating equipment for use in sample checks, whose features it will not disclose. This equipment may be used by ACC-empowered commissioners during on-site inspections.