

## Common standards for gaming via new technologies

*This paper was drafted in August 2005 as a discussion paper for the GREF Working Group on Technical Issues, and explains the author's perspective on topics to consider with regard to common standards for gaming via new technologies, like for instance internet and mobile phones. Many changes in the use of several new technologies have taken place in the jurisdictions represented in the Working Group in the years that have past since the draft of this paper. The paper has not been updated to reflect these changes.*

*The paper has been discussed and accepted in the 3rd meeting of the GREF Working Group on Technical Issues on 2 September 2005, St. Helier, States of Jersey, and has been endorsed at the annual meeting of GREF on 12 June 2009 in Tallinn, Estonia.*

In one of the break out groups in the annual meeting of GREF last May in Brussels there has been a first discussion on common standards for gaming via new technologies. The participants thought it a good idea to discuss the subject further in the working group.

Before further discussion on this subject was held, it seemed to be practical to determine what the working group thinks that has to be understood with regard to gaming via new technologies. Do we regard all forms of remote gambling, like through television, internet, (cell)phones, SMS, MMS, as gaming via new technologies? In the third meeting, 2 September 2005, the working group did not think it necessary to have a definition with regard to gaming via new technologies, because it is common knowledge that it concerns any distribution of gaming through electronic channels.

However a question to be answered is, why do want to have a set of common standards for gaming via new technologies?

A part of the answer would be the following:

- To have objective criteria to measure and guarantee the integrity of a gaming device used with games via new technologies and the games played.
- To insure that a game offered via new technologies is fair to the player and offered by the operator in a indisputable way and which can be audited to proof the integrity of the games played.
- To make transparent a set of demands that any regulator should want to make to a game via new technologies and the operator thereof.

It should be obvious that the common standards to agree on should be flexible with regard to new technology to be developed in the near future. Also not all common standards have to be per se applicable for every jurisdiction.

**Question:** What other elements could be important in the motivation for pursuing common standards for new technologies?

Underneath an attempt is made to formulate some common standards for gaming via new technologies. The listing is far from complete and just some food for thought. I hope it will serve as a first draft to be amended and completed by the discussions in our meetings and by means of the regulators area on the website of GREF. Please feel free to give your comments on the subjects and to adapt this document.

There will probably be three areas to address: the central system (hardware and software), the game (software) and the player surroundings.

**Question:** Are there any other areas to be addressed?

### **The central system**

1. The system that has been shown to the regulator shall be identical to the system to be used.
2. All hardware and software parts shall have ID-numbers and will be uniquely identified and listed in the accompanying documents.
3. The license number of the operator and name and address of the regulator will be stated on the operators website.
4. The regulator will be provided with information about agreements with service providers, telecom companies and financial institutions.
5. A security protocol shall be submitted stating all measures to insure that the system is secured from breaking in by third parties.
6. A description will be given of the procedures in case during a the play of a game communication is disrupted.
7. The random generator to be used will have to be certified to be random.
8. The outcome of the random generator will be statistical independent and there will be no possibility to predict the outcome of a game based on the outcome of a previous game or a series of previous games.
9. A description will be given of the procedure of system software verification.
10. All people, systems and third parties connected with the system during play must be authenticated.
11. The communication protocol used must be generally accepted and must have been proven to have data recovery provisions and proper error detection.
12. A description will be given of the system to protect/encrypt communication and the exchange of information with players.
13. A description will be given of the way to register and of the verification procedure.

**Question:** Should registering through trusted third parties be allowed?

14. Only play from registered players with a cleared players account can be accepted for play after proper identification and verification.
15. A description will be given of security measures and procedures with regard to the system.
16. A register will be kept of people who have access to the system, their passwords and the levels of access.
17. A description will be given of the method to verify the operating system.
18. A description will be given of the data recovering system and the recording of games and transaction details.
19. A description will be given of the procedures when a certain game malfunctions.
20. A register will be kept on date, actual time and player concerned of players with disrupted games.
21. All security measures and precautions that can reasonably be expected have to be taken to avoid attacks on and breaches of communication between player and the operator.
22. A description will be given of accepted ways of payment for play.

23. A description will be given of the procedure for protection of the assets from players.
24. Any information with regard to player accounts shall be kept confidential.
25. The player account will be secured against unauthorized access.
26. All transactions, withdrawals and deposits will be registered in a log.
27. The rules of each individual game will be provided and all graphics will be shown to the player in completion with the possible decisions a player can make.
28. The rules of the games will be available to the players, and there will be no misunderstanding about the stakes that can be made, the height thereof and the height of the prizes to be won.
29. An unambiguous prize schedule will be provided for each individual game, with a transparent description of how jackpots are built up and a description will be given of the way they can be won.
30. A confirmation notification will be given of the bets made by a player and total amount wagered.
31. A description will be given of how disputes will be settled.
32. A register will be kept of unclaimed prizes.
33. A name and address for complaints will be stated with every notification of bets made.
34. The hold percentage for the operator will be stated with every individual game.
35. There will be a possibility of direct payment of jackpot prizes to personal accounts of the players.
36. A register will be kept of excluded players and of players who are limited in the number of plays.
37. A description will be given of the procedure to warn players when their playing behavior suddenly changes, suggestion will be given for exclusion or limiting of play.
38. The system will be able to restrict, enable or disable each individual player for each game offered.
39. The system will be able to enable or disable a certain game for play when irregularities are suspected.
40. A description will be given of the procedure to protect data on players and privacy protection.

**Question:** Should monitoring of playing behavior be allowed or even be obligated for the goal of the prevention of compulsive gambling? Are there ethical or privacy related obstacles?

41. A register will be kept of uncompleted games.
42. A description will be given of the way the financial transactions are recorded and accounted for.
43. A listing will be given of total play per day for the regulator.
44. The financial administration shall be organized in such a way that each individual transaction can be recovered and instant audit trails can be made.
45. The reports of all incidents that are required to be registered can be derived from the system on behalf of the regulator on a daily, weekly, monthly or yearly basis or any other time period a regulator seems fit.
46. The reports on number of games played, money wagered, wins by players and revenue for the operator will be available on request for the regulator, and if appropriate for the tax authorities.

### **The game**

47. All games shall be tested and certified by a testing institute or certification authority.
48. All modifications shall be retested.
49. The operator will provide software of each game, including all graphics.

50. The operator will provide the source code of each game.
51. A description will be given of the random generator used with each game.
52. A description will be given of the rules of each game.
53. A description will be given of messages, general rules and instructions for the player.
54. A description will be given of software verification per game.
55. A listing will be given of all schedules of prizes.
56. A description will be given of when a game is started by a player and when it is completed.
57. When a jackpot is used, a description will be given of the start out value and the way the jackpot is incremented.
58. When a mystery jackpot is used, a description will be given of the way it is awarded.
59. The rules of the game are fair and not misleading.
60. There will be no misinterpretation possible about the intention of how to play the game.
61. The player will have access to all information necessary to make his bets and decisions during play.
62. There will be no false expectations about what the prizes to be won are.
63. No near miss display will be accepted.
64. Visualizations of gaming devices will be truthful.
65. The process of how the determination of the results of a game is made, shall be clear to the player.
66. It will be clear to the player what the theoretical return for each game to the player is.
67. It will not be possible to influence the outcome of a play, other than the decisions of the player and the random generator.

### **The player**

68. A description will be given of how a player can register for play.
69. A description will be given of the data on a player that are stored.
70. Login and logout information will be available for the player.
71. The player will be reminded to renew his password frequently.
72. A description will be given of the method of identification of player and checking of age.
73. No players under the age of 18 years are registered.
74. A description will be given of the method of verification of the age of the player.
75. A description will be given of the procedures for obtaining a players account.
76. A clarification will be given of the ways to pay for each play and how to fill ones players account.
77. A description will be given of the procedure for players to exclude themselves from play.
78. A description will be given of the procedure for players to limit the time of play per day, per week or month.
79. A description will be given of the procedure for players to set financial limits to their play, either per game, per play, per day, per week or month.

**Question:** Should limits differ from game to game? E. g. stakes on sport bets might be higher than those on casino games.

80. A description will be given of the procedure with regard to unclaimed prizes.
81. A description will be given of the procedure with regard to incomplete games.

**Question:** What would be best practice with incomplete games? Who will bear the risks of communication interruption? What will be the message to the player?

82. The name of the game and the rules shall be clearly presented to the player.
83. In the case of a incomplete game for one or a number of players this shall not influence the results for the other players playing at the same time.
84. Credits played, credits left, win and loss shall be clearly presented to the player.
85. At all times during play the player will have access to information about how to play the game.
86. At all times the status of the game will be clear to the player. This means that no uncertainty exists about what has been staked and in what stage the game is.
87. It will always undoubtedly shown to the player on what he has put his stake.
88. Before a player hits the play button it will always be clear how he can change or cancel a bet or stake.
89. The minimum and maximum bet will be clearly shown to the player.
90. Wins on multiple bets will be stated separately, apart from the total win.
91. All winnings will be added to the players credit meter.
92. The win plan and symbols used in a game will be clearly shown to the player.
93. In the case of a jackpot a description will be given of how the jackpot is funded.
94. The winning of a jackpot will be stated with the actual amount to the player concerned and all other players participating in that particular game. Also the restart value will be shown to all players connected before a new play is accepted.
95. Game information must be provided to the player through the same media as the game is played with.
96. When contact with a player is lost, the game for that player will be terminated.

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