# GAMBLING COMMISSION

## Machine Standards Server Networked and Downloadable

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#### Introduction

This standard is applicable to all categories of gaming machine as defined under section 235 of the Gambling Act 2005 (the Act). This standard will come into force for any gaming machine terminal, sited within Great Britain on or after 1 September 2007, that is dependant upon some external device for the purpose of gambling (including software downloads, server based systems or external random number generators), subject to the Implementation Annex to this standard (published separately). That Annex identifies those requirements of the standard which will come into force on various dates in the period 1 September 2007 to 1 September 2008.

The purpose of the standard is to set out in detail the Gambling Commission's (the Commission) requirements with respect to game features, display notices and general machine operation including metering. These have been developed to help ensure the Commission's three licensing objectives are met. Those objectives are to:

- prevent gambling from being a source of crime or disorder, being associated with crime or disorder or being used to support crime;
- ensure that gambling is conducted in a fair and open way; and
- protect children and other vulnerable persons from being harmed or exploited by gambling.

Operators or end users should not rely upon these standards as a measure of reliability, quality or minimal security requirements.

These standards permit equivalence between different types of technology and do not specify proprietary products or technologies. Testing regimes for these standards will permit equivalent international standards (ISO). It is not intended to limit game content and the use of new technological developments provided that the objectives of the standard are met.

#### **Other Relevant Gaming Machine Technical Standards**

- Technical Standards for Category A, B1, B2, B3 & B4, C & Complex Category D Machines
- Technical Standards for Non-Complex Category D machines
- Technical Standards for Legacy machines<sup>1</sup> (Category B3,B4,C& D machines)
- Technical Standard for Wireless Systems (All categories of machine)
- Technical Standard for Cashless Systems (All categories of machine)
- Technical Standard for Linked Progressives (All categories of machine)

<sup>&</sup>lt;sup>1</sup> Essentially 'legacy machines' are Category B3, B4, C or D machines which were lawfully in use on premises in Great Britain on 31 August 2007 which comply with the regulations made under s240 of the Act and certain details of which have been notified to the Commission.

#### **1.0** Server networked and downloadable game requirements

This standard is applicable in any of the following circumstances:

- a. where a gaming machine is designed or adapted such that games are operated partly on a player terminal and partly on another device (e.g. server based systems);
- b. where the control software can be modified, removed or added to the player terminal via a network;
- c. where the control software can be modified, removed or added to the player terminal using a portable device without physical access to the gaming machine (e.g. a laptop temporarily networked to the gaming machine to update flash RAM); or
- d. where the RNG (Random number generator) is external to the player's terminal.

Examples of such systems are where the terminal control program, randomly generated game determinants or other game content is generated by a central server and downloaded to the player terminal for the operation of the game. This section does not apply to system triggered jackpots or game features which may be external to the player's terminal.

### **1.1 Communication requirements**

All communication protocols must have error detection and/or recovery mechanisms which are designed to prevent unauthorised access or tampering.

#### **1.2 Software verification**

Where any control software is modified or downloaded onto the player's terminal the following requirements must be met:

- a. the system responsible for the software upload must be capable of verifying that all control programs installed are true and exact replications of those communicated to the device in order to ensure game integrity. Where any error is detected an appropriate action must be taken to either remedy the fault or disable the game; and
- b. there are sufficient security measures to ensure that any control software residing on the player's terminal remains true and is an exact replication of that communicated to the device.

#### **1.3** Remote access and audit requirements

Where a player terminal has the facility for remote access for the purpose of control software modification, deletions, additions or product support, the following must be met:

- there must be sufficient security measures to prohibit non-authorised access; and
- an audit log of the following must be retained for a minimum of twelve months:
- a. time and date of the access and/or event;
- b. log in name;
- c. download data files added, modified or deleted;
- d. the player terminal(s) which the file or program was downloaded to and, if applicable, the file or program it replaced; and
- e. modifications to the player terminal configuration settings and what the changes were.

It is preferred that such data as log on duration, the file size and easily identified program ID's are included in the log.

The audit log(s) and any applicable records must be available for inspection.

### **1.4** Pay table/denomination configuration changes

Player terminal control programs that offer multiple pay tables and/or denominations that can be configured via an external communication must comply with the following:

- a. information relating to the player's likely return (%RTP) must be transparent to the player for the pay table in operation and in particular where any changes occur at times when the system is available for play;
- b. the game is in an idle state when any update occurs; and
- c. any change to the pay table will not cause inaccurate crediting or payment.

#### **1.5 External random number generator**

Where a random value or other element used to determine the game outcome is uploaded to the player terminal from a device external to its cabinet by means of electronic communication then the arrangement must comply with the following:

- a. the method of transmission must be secure, with error detection and/or recovery mechanisms;
- b. there must be a means of authentication which would alert the operator to any external tampering, modification or interception and replacement of the transmitted random variable that may be used to determine a game outcome;
- c. where an error occurs the terminal must display an error message with the appropriate audio and visual indicator, and record the details, including time and date of the error in a log. Correcting such an error must require operator intervention unless there is a secure automated process to do so; and
- d. an audit log of sufficient time stamping of significant events so as to be able to resolve any player disputes arising as a result of timing issues must be retained for a minimum of one month. The Commission does not intend to set out exact requirements for time stamping of significant events as it is considered better that the manufacturer do so on the basis of the overall game and system design.

The system must be capable of displaying the audit log on the site operator's premises.

## These requirements were notified in draft to the European Commission in accordance with Directive 98/34/EC, as amended by Directive 98/48/EC

#### **Gambling Commission June 2007**

The Gambling Commission regulates gambling in the public interest. It does so by keeping crime out of gambling, by ensuring that gambling is conducted fairly and openly, and by protecting children and vulnerable people from being harmed or exploited by gambling. The Commission also provides independent advice to government on gambling in Britain.

For further information or to register your interest in the Commission please visit our website at: **www.gamblingcommission.gov.uk** 

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