Minimum Technical Requirements for EMS (Cabling and Site Controller) Advisory

Introduction

The Minimum Technical Requirements for Electronic Monitoring System is in 2 sections covering:

- Gaming Machine Communication Interface & LAN Requirements
- Site Controller Minimum Technical Requirements

The standard incorporates specifications produced by the Queensland Office Of Gaming Regulation. This in turn is based upon specifications for the physical cabling and connection as designed and produced by Agilent Technologies.

Please read the footnotes to the associated Standard requirements, as these contain important advice.

A successful install will require careful consideration of all the associated documents. In particular this will require those contracted to do the install to access and understand the Agilent and Queensland documents.

The incorporated Queensland documents are available on the Department's website www.dia.govt.nz. The Agilent documents are available on Agilent Technologies website, www.**agilent**.com.

Societies are responsible for ensuring that the materials used and the quality of installation comply with the standard. Department compliance inspectors can be expected, as part of their audit program, to check installations to ensure compliance with the standard.

Installation

While the standard may give the impression that the installation is very technical and difficult, we do not expect this to be so in practice. The installation is not beyond the capabilities of any individual or company that offers a professional cable installation service. However, they do need to read and understand fully all associated documents and are able to source correct material for the install.

We are aware that many professional installers may not have much familiarity with the type of fibre optic cable used. However, DIA has completed a trial venue install and this indicated that the sourcing of material, installation and particularly fitting the fibre optic cable connectors was simple and straightforward.

The fibre cable and connectors are not readily available off-the-shelf but are obtainable from Agilent agents and other cabling companies prepared to offer services in accordance

with the required cabling requirements. We are also aware of a private company offering made to order install kits that include the necessary cable and connectors.

It is advisable that fibre cable connectors if they are not plugged into a socket (such as the site controller connectors) are temporarily covered with a proper connector dust cap to prevent the connector end becoming dirty. Do not use sticky tape or other adhesive product as this could cause significant damage to the connector fibre end.

At times it may be necessary to remove or swap out a gaming machine. Normally this is done while the venue gaming machines are not in use. As explained in the standard powering off or disconnecting the fibre at a gaming machine will disable all gaming machines.

The affected gaming machine can be temporarily bypassed by joining the 2 fibre ends at the gaming machine via a feed through/splice connector. The standard explains this in more detail and it would be expected that your service technicians will have these connectors. It would be advisable to ensure each venue has 1 or 2 spare connectors for emergencies and these can be stored in the site controller cabinet. This should be regarded as a temporary measure and, if expected to be long term, either re-cable or provide a separately powered FO interface card.

Site Controller Cabinet

The standard requires a secure cabinet only where the site controller and associated equipment is stored in an area accessible by the public (locating the cabinet in the gaming room will reduce fibre cable costs). However, we would strongly recommend that you always make use of a secure locked cabinet even for non-public areas. This offers significant advantages for security and prevention of inadvertent damage or disconnection of the units and cables. Placement of the units should be such that there is sufficient space for ventilation and heat dissipation.

It is probable that for the majority of the venues, connection to the EMS monitor will be by wireless connection. The location of the cabinet should not be in an area of the venue known to suffer poor mobile phone reception. A metal type cabinet is not recommended, as this will prevent wireless reception.

Ensure this equipment is not in an area that is dusty, near water or where liquids etc may be inadvertently spilled and damage the equipment.

It is important to ensure that adequate 230v provision is made for the site controller and additional associated equipment such as telecom network terminating unit, e.g. modem, and associated fibre and interconnecting cables.

The following are the provisional size of each item expected to be located in a secure cabinet:

Site controller	196 (L) x 170 (W) x 282 (H) mm.
Telecom Network Terminating Unit (NTU)	160 (L) x 197 (W) x 50 (H) mm

The site controller will be internally equipped with fibre optic interface cards and will not require additional space for external cards.

The size of the cabinet envisaged is similar or slightly larger than the length and width of a gaming machine. It is of a reasonable size and will require careful placement.

An all-metal cabinet is not recommended, as this would interfere with signal reception if wireless connection to the EMS host is used. Initial indications are that wireless will be available to 90 percent or more of venues. Actual provision of wireless at a venue will depend on expected signal strength. A metal cabinet with a glass door would likely be satisfactory but you should check with your cable installer or leave the decision on cabinet till more information is available.

Upcoming Advice

Communication requirements for connection of a venue to the EMS host are still to be finalised.

All jackpot controllers that require hand pays to be made will require connection to the site controller to allow the EMS to record jackpots awarded for the purpose of calculating gaming machine proceeds. The detail for this is still under investigation and will be advised separately.

The site controller also has the facility to allow a venue to download to the venue PC a copy of the gaming machine meter readings on demand. It is likely that at least an additional cable will be required between the venue PC and site controller. This will not be a fibre optic cable but a standard copper cable such as for cat5/6 etc. We will provide more detail soon.

Once we have the details we will update this advisory. Keep checking our webpage for more updates.