Table 2: Cost comparison of IP and analogue CCTV systems in a sports stadium project **Analogue system** IP addressable system **Fully functional dome camera** High resolution (470tvl) colour/mono, low light, weatherproof housing, column mounted, high speed pan/tilt/zoom with presets mounted, high speed pan/tilt/zoom with presets. IP interfaced within building Installed $10 \times £5000 = £50.000$

Fully functional dome camera - wall mount As above but wall or ceiling mounted

Installed 22 x £4000 = £88.000

Static camera

High resolution colour/mono switching, ½ inch CS, 8-80mm varifocal lens, all weather housing, wall mounted Installed 32 x £1750 = £56,000

Digital recorder (DVR) 16 channel, 1 terabyte, networkable, 1-4CIF, 400ips, rack mounted Installed 4 x £12.000 = £48.000

External RAID storage 2 terabyte, hot swap per DVR. Installed 4 x £5000 = £20,000

Matrix 64 inputs, high speed switching, rack mount. Installed 1 x £4500 = £4500 Matrix kevboard

Joystick control, desk mount Installed 10 x £900 = £9000

Multiplexers 16 channel, duplex, colour, rack mount

Installed 4 x £2000 = £8000 Video amplifiers

8>16 split, auto gain and control, rack mount. Installed 8 x £1000 = £8000 Workstations

Pentium 4+ level PCs with CDR/DVD, proprietary software, high speed networking, flat screen, network switchers. Installed 10 x £2000 = £20,000

Display

Combination of 42" to 19" display for control stations Installed 42" LCD 6 x £4000= £24,000

Installed 32" LCD 6 x £3500 = £21,000 Installed 19" LCD 14 x £2000 = £28,000

Console and racks

Custom built display and control consoles for match day stations Installed 3 x £15,000 = £45,000

Remote site Remote site monitoring equipment and annual charge. £20,000

UPS Shut down only. Installed 3 x £3500 = £10,500

Total = £460,000

Assuming an existing internal IP network with sufficient spare capacity.

Fully functional dome camera – external mount High resolution (470tvl) colour/mono, low light, weatherproof housing, column

Installed 10 x £5,000 = £50,000 Fully functional dome camera - wall mounted

As above but wall or ceiling mounted wired directly to IP network Installed 22 x £3500 = £77,000

Static camera High resolution colour/mono switching, ½ inch CS, 8-80mm varifocal lens,

all weather housing, wall mounted Installed 15 x £1500 = £22,500

IP static camera Internal only, colour, 1/4 inch varifocal, low voltage POE.

Installed 17 x £1500 = £25,500 IP encoders Analogue to IP interface for non-IP cameras. Installed 10 x £1200 = £12,000

System software manager Proprietary software for CCTV management 1 x £10.000 = £10.000

Network digital recorder (distributed configuration) 24 channel, 4.8 terabytes, networkable, 1-4CIF, 400ips, virtual matrix, rack mounted

Installed 1 x £25,000 - £25,000 Network digital recorder (distributed configuration) 48 channel, 4.8 terabytes, networkable, 1-4CIF, 400ips, virtual matrix, rack mounted

Installed 1 x £35,000 = £35,000 Additional storage

External storage devices (1.5Tb, 3.0Tb, 4.8Tb), Installed 3 x £15.000 = £45.000

Modular keyboard

Joystick control, desk mount. Installed 10 x £1200 = £12,000

Workstations

Display

Pentium 4+ level PCs with CDR/DVD, high speed networking, flat screen Installed 10 x £4000 = £40.000

Combination of 42" to 19" display for control stations Installed 42" LCD 6 x £4000 = £24,000

Installed 32" LCD 6 x £3500 = £21,000 Installed 19" LCD 14 x £2000 = £28.000

Console and racks

Custom built display and control consoles for match day stations Installed $3 \times £15,000 = £45,000$

Remote site

Remote site monitoring equipment and annual charge. £20,000

Shut down only. Installed 3 x £3500 = £10,500

Total = £502,500