



## TELEFÓNICA DIGITAL UK HEADQUARTERS

Telefónica Digital is a global business division of internationally recognised company, Telefónica. With presence in 25 countries and a staff of over 285,000 professionals, Telefónica has continually been at the forefront of the telecommunication sector; providing communication, information and entertainment. Telfonica Digital was created to develop opportunities within the digital industry and deliver new growth for Telefónica through research & development, venture capital, global partnerships and digital services such as cloud computing and mobile advertising.

Their London-based development spans the Ground, 4th and 5th floors of their flagship London headquarters near Piccadilly Circus and consists of an amphitheatre equipped for state-of-the-art presentations, an assortment of displays (ranging from 40" to 103" in size) for various meeting rooms and a unique area in reception showing projected images on the ceiling and end wall that combine to give a single video image, providing a unique "tunnel" experience for employees and visitors.

Telefónica Digital's new offices represent an investment of over £1 million.

Telefónica were keen to make an impact and continue the company's known ethos for contemporary and relaxed office space at the new HQ and award-winning AV systems integrator Smartcomm worked closely with them to achieve this.

### Ground Floor Welcome Zone

The Welcome Zone is the first point of call for all visitors, therefore the space had to be a reflection of a contemporary and fresh company, as well as providing corporate information to the guest waiting area.

Three sleek 55" Samsung portrait displays have been installed to provide information to waiting visitors from the windows of the reception area, using signal content from the digital signage/IPTV system.

### "Tunnel" experience

As guests approach the Welcome Zone, they enter through a tunnel-like structure. A layout of rear projection screens have been arranged in such a way that images are projected onto ceiling screens and an end wall screen providing the unique tunnel experience.

The ceiling image is created via eight Hitachi CP-AW2519NM short throw projectors providing a combined image onto the ceiling rear projection screens in a 4 x 2 arrangement.

The end wall image is provided by four Hitachi CP-AW2519NM short throw projectors providing a combined image onto a 2x2 rear projection wall arrangement. Both the ceiling and end wall images are combined to provide a single video image, with each projector receiving a DVI/HDMI feed from one of the two PCs running Dataton Video Wall software over DVI extenders. A dedicated PC is provided within the AV rack to create and edit the content displayed on the projectors.

### Side Video Wall

This stunning video wall is a focal point of the offices, providing a single image comprising of 28 EyeVis video tiles. The video wall image is provided via a dedicated PC running Dataton Video Wall Software.



This image is then distributed via a distribution amplifier across six DVI feeds, each running a maximum of 5 EyeVis video tiles. The DVI signal runs from the AV rack room to the tiles over DVI extenders. The Eyevis video tiles content is created and edited via A dedicated PC.

Music is provided by an iPod docking unit, amplifier and ten flush mounted Tannoy ceiling loudspeakers with steel back fire domes. The volume of the system is controlled via a 6" Crestron TPS-6LB touch panel that also controls all video and audio aspects on the ground floor

#### omniSHAPES Video Wall

Smartcomm worked with eyevis Omnishapes' sole UK distributor, PSCo to produce the highlight of the Telefónica Digital installation - a creative 'chequers board' design 28-screen video wall. The original concepts included a number of different display technologies from Projection to 103" Panasonic Plasma screens.

The omniSHAPES are rear projection display modules that can combine into virtually any video wall shape and create projection surfaces in countless configurations. Each module has its own internal signal-processing unit for the perfect geometrical adjustment of the input image to the displayed part. Concave, straight and convex arrangements are all possible due to the variability of the omniSHAPES.

28 rectangular screens were used to build a 4-high and 10-wide wall, with a further chequerboard effect of screens at either side of the main display, capable of rendering seamless graphics across its entirety. The colour rendering of omniSHAPES is extremely consistent from tile to tile and enhances overall visual quality. In addition, each module can stand alone and has its own signal processing capability, which reduces additional hardware requirements.

Each 'shape' features eyevis' innovative LED lighting technology, which not only produces bright, sharp and consistent illumination but also ensures low power consumption and low heat generation.

The modules are only 400mm deep, and so their slim design enabled Smartcomm and PSCo to make the most of the available room size so as to maximise the visual effect of the video wall.

Moreover, eyevis has designed the omniSHAPES modules to promote easy maintenance without requiring access behind the installation.

Maintenance is possible either from the front or the back, allowing fast and easy change-out of the projector unit if required. The LED-based units have an average lifetime of 60,000 hours until half brightness, meaning they could run 24x7 for 6 years.

omniSHAPES has allowed a future-proof system that can be upgraded to support resolution greater than the 1024 x 768 pixels of the current configuration. This allows the system to be upgraded cost effectively in the future as more advanced high-definition standards become available.

#### Fifth Floor Reception

The fifth floor reception is a second area for greeting visitors to Telefónica HQ and includes a second striking video wall displaying a single image comprising of twenty eight Samsung LCD displays, installed in a seven wide by four high arrangement.

6" Crestron TPS-6LB touch panels control all video and audio aspects on the ground, 4th and 5th floors.

#### Expo Area Rooms

This area includes a presentation room with a large display and associated presentation loudspeakers, but when required, the area can also be split into three rooms, each providing different display solutions.

Programme audio is seamlessly transmitted through wall-mounted speakers either side of the 103" display screen. In addition twelve Tannoy flush-mounted loudspeakers have been installed in the ceilings of all three Expo Rooms; four in each room for voice reinforcement or programme audio.

A Crestron 6" touch panel provides the control for the two wall displays, Blu-ray/DVD player, audio, lighting and blinds. To ensure the ultimate convenience, Smartcomm has also included allowance for three iPads to control the meeting room system. These iPads provide control from any position within the Expo Area Rooms. When the room is acting as one large area, all the iPads will perform the same functions and have the same interface displayed. When the room is split into 3 separate rooms each iPad will control their respective room.

**Boardroom**

The boardroom is a state-of-the-art digital space with a Crestron DigitalMedia™ system feeding a wall-mounted Panasonic 103" high definition display for presentations, video conferencing, IPTV and Blu-ray/DVD playback. The boardroom table hosts twelve microphones linked to both the video/audio conferencing and interpretation systems.

The 103" screen displays all sources through the Crestron DigitalMedia™ system up to

full 1080p HD with inputs for Cisco Video conferencing system, IPTV digital signage, HDMI, and VGA and audio.

The audio will be provided by programme speakers mounted in the wall either side of the display screen, as well as ten ceiling-mounted loudspeakers. The audio from the display inputs, interpretation channels and twelve microphones mounted on the desk will be routed to a card frame auto DSP and echo canceller. This unit will mix, route and echo cancel the audio as appropriate to a number of outputs including room speakers and video conferencing.

A dual language Bosch DCN interpretation system located remotely has been included in the solution. Video images are sent to the two interpretation rooms via the structured cable so that the interpreters can see who is talking. Audio to and from the interpreters will be routed via dedicated Bosch DCN cable.

**Meeting Rooms**

An assortment of displays have been provided throughout the meeting rooms. Taking pride of place in the larger meeting rooms are NEC 55" wall-mounted LCD HD screens, displaying presentations from laptops, HDMI and Skype communications to the highest quality.

The facilities will be based around the NEC display with built-in loudspeakers. Control of the display, including input selection and volume levels are carried out by the screens' hand-held infrared remote. For Skype Communications, a Cisco webcam has also been installed above the screen.

NEC 40" wall-mounted displays have also been provided for the smaller meeting rooms, controlled via a hand-held infrared remote control. Within the open meeting areas on both the 4<sup>th</sup> and 5<sup>th</sup> floors there are 55" displays mounted on floor stands housed within joinery. On the 4<sup>th</sup> floor there will be two displays mounted back-to-back and a third single display. On the 5<sup>th</sup> floor there will be two displays mounted back-to-back. Two meeting rooms on 5th floor have 1880 x 1175mm high Smartboards with attached loudspeakers for interactive presentations. Smartcomm have also programmed and installed Evoko's Room booking software, completing the high tech meeting room facilities.





**Health and safety precautions**

Safety, as always is an important part of any audio visual system. In every room, a connection has been taken from the building Fire Alarm system, which, when the fire alarm is initiated, will inform the Crestron control system of the status – in the event of the fire alarm being triggered the systems automatically mutes the audio and video within the room and displays a message on the touch panel devices – in the event that the fire alarm is activated for more than 60 seconds, the room’s audio visual equipment will be shut down and the lighting returned to their brightest setting.

**Mobile Video Conferencing**

The Telefónica offices are a constant buzz of activity, and there will be instances when all meeting rooms are in use. Smartcomm have therefore looked at mobile video conferencing facilities, so employees are not impeded. The transportable system sits on a portable stand, housing an NEC 42” display with built-in

speakers, a microphone, a VC camera and the Cisco TelePresence™ C20 system, creating a powerful video communications hub.

**Amphi Theatre**

The 4<sup>th</sup> floor Amphi Theatre is equipped for state-of-the-art presentations with an NEC ceiling-mounted projector and electrically operated 110” Dalite projection screen, accompanied by an array of ceiling loudspeakers. A stylish wall-mounted Crestron 6” TPS-6LB touch panel controls the projector, projection screen, audio and the room’s lighting.

**Brand Pod**

These unique facilities are an area for informal meetings as well as a space for employees to take a break. The space is based around a single wall mounted 65” display with a 5.1 surround sound speaker arrangement. Smartcomm have even installed an Xbox 360 with Kinect that is fed through the screen and surround sound system, for an extra bit of fun for team. The screen will also be able to display the IPTV feed.

The end result is a state-of-the-art installation that the client was proud to open to their employees in November 2012.

*“Our demands in terms of quality and time were tremendous; however Smartcomm took them easily in their stride.*

*Project Management was very good and this, combined with a common sense approach to build challenges and excellent post sales support lead me to fully recommend Smartcomm to any new customers.”*

Martin Copeland, Project Manager, Telefónica.

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**Project Duration: 4 Months**  
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