The iconic concrete and glass circular BT Tower might be considered a piece of vintage architecture on the outside, but on the inside it plays host to a state of the art television facility.

The BT Tower Facilities

Originally set up as the centre point of the British Telecom microwave network, the 191 foot tower now relies on its subterranean fibre optics links. With BT TV and the launch last year of BT Sport, based at the International Broadcast Centre in Stratford, the need for an efficient, modern facility has increased sharply.

Its central London production and post-production hub also works with outside clients, so upgrading the facilities has been an advantage for external, as well as in-house users. Recently, BT upgraded the Tower’s International Monitoring Centre in time for this year’s Commonwealth Games in Glasgow. The rebuild was the work of VSC Design.

VSC & BT

BT has worked with VSC since the Tower decided to bring its facilities bang up to date. July 2013 saw the completion of BT’s Sports Monitoring Centre (SMC) and before that in 2007, VSC project managed and installed the production and broadcast facility, a project that took four months and included bespoke suites designed by VSC.

More recently VSC provided systems integration, project management and installation for BT Media’s upgrade to a Snell Sirius 830 routing system and three MV-Series multi-viewers to support television outside broadcasting (TVOB) operations for the BT Tower facility. After the SMC, the IMC was the next step for the tower facility: a high profile and critical business project to modernise and upgrade the outmoded centre was devised by VSC who successfully secured the tender.

The Brief

BT’s brief was to transform the IMC into a state of the art facility capable of functioning 24/7, monitoring and responding across numerous platforms.

The original room had been equipped when analogue was still a dominant technology. It was never designed to monitor a cable head end carrying 140 channels of video, or an expanding and complex IP network capable of
delivering across broadband. The new, second generation IMC had to be constructed with an eye to the future and built to last. The IMC had to encompass the digital TV systems currently in use. Working with VSC, BT successfully progressed through digital SDI, High Definition, 3D and can now embrace Ultra High Definition. The new International Media Centre is designed to have 39 operational monitoring positions, each with multiple screens, tablets and traditional rack mount panels close by. A comprehensive monitor wall displaying both mix of baseband and PC originated signals is situated close by.

**A Smooth Transition**

Operations were to be kept flowing smoothly throughout the upgrade, with the room still capable of providing a level of service, albeit reduced. During the build phase, VSC worked closely with BT and BT’s civil contractors to design a migration method so that the new layout and development of equipment could take place in phases, without business disruption. There were three distinct phases: the re-build; the furniture and systems integration; and finally, the design and installation of the standalone equipment. VSC’s West London facilities were utilised to assemble, test and commission the equipment prior to install.

**“VSC have been engaged by BT Media & Broadcast for numerous broadcast projects. This included being responsible for delivering the broadcast facilities for the launch of the prestigious BT Vision service in 2007. The services provided have included the design, supply, installation and commissioning of broadcast basis with BT’s technical team to produce the initial specification and scope of works for several projects. The work has always been of a high standard and delivered on time. I would highly recommend their services”**.

Nick Jordan, BT Project Manager

VSC’s involvement with BT and the Centre is ongoing. Following the completion of the IMC, it has been contracted to provide on-going technical support for BT for the IMC and SMC areas.