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FTTH – AN INDUSTRY BUZZWORD HITS THE MAINSTREAM!

by

**Mike Gilmore, Technical Director of the FIA
for Networking+ (November 2008)**

All of a sudden the term FTTH has reached the mainstream media. This may be the result of an increased output of documents from OFCOM, the Broadband Stakeholder Group and UK government itself - whatever the reason, the buzzword “FTTH” has suddenly taken hold and the FIA has become very popular as a source of informed comment and has had to respond accordingly.

Of course, the FIA has been the focus of the mainstream media already this year. Daily hits on the FIA web-site tripled early in September leading the FIA Council to expect a massive increase in membership. Only later did we realise that Lewis Hamilton had been penalised during the Belgian Grand Prix at Spa, losing all his points, and there was confusion between the Fibreoptic Industry Association web-site (www.fia-online.co.uk) and that of the Federation Internationale de l'Automobile (www.fia.com).

However, the Fibreoptic Industry Association is a source of information for the columnists wishing to display their knowledge on the subject of “broadband deployment technologies”. Unfortunately, many of them do not understand the difference between the objectives of the broadband deployment and the means by which it can be delivered.

The biggest challenge is to define “broadband”. The great danger is to see “next generation broadband” in terms of a specific data rate - no matter how much a leap it may be from where we are today. Looking back, our current broadband service is fantastic compared to analog modems but we still complain about quality of service - primarily because the applications have changed. What we need to focus on is “true” broadband which has to meet the twin demands of scalability and flexibility - in support of as yet unknown but potentially differentiated subscriber demands.

At a recent seminar in Portugal, a speaker presented the increasing data rates that would be required to deliver HD, VHD (1080p), SuperHD (2160p), UltraHD (4320p) and even 3D-TV respectively, with the most basic 3D service requiring 280 Mb/s. It would be folly for the UK to define a broadband delivery strategy only to realise it could not support the inevitable higher data rates required to provide improved video services. Scalable provision does not only suggest but actually mandates fibre-to-the-home (FTTH) - not just to the building (FTTB) or to the street cabinet (FTTC).

However, there are further considerations. Most proposals incorporating FTTH include the implementation of GPON or GE-PON wherein up to 2.5Gb/s of downstream data is shared between 32 subscribers. A service provider could, and probably will, create service differentials within that overall data rate (and charge accordingly). Nevertheless, this approach prevents one of those subscribers from obtaining significantly higher data rates - even if they are willing to pay for it - without a complete upgrade to the service provision for the complete passive optical network serving that subscriber. This indicates that a point-to-point connection (either physical or logical e.g. WDM PON) may be preferable which would allow the desired flexibility of services provision. However, such a “subscriber right” would have to be a matter for regulation.

Too much focus on FTTH is dangerous as it uses buzzwords and four letter abbreviations to obscure the more fundamental issue - delivery of true broadband, providing both scalability and flexibility of provision, is not a technological matter; instead it is matter of nationally defined strategy and regulation. It is to be hoped that our government and the appropriate regulators understand their responsibility and take action sooner rather than later - can you hear the nation holding their breath?

If you would like to have your say on this topic and would like to join the FIA in order to do so, e-mail jane@fiasec.demon.co.uk or, alternatively, you can contact the FIA Secretariat in 01763 273039.

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Biography

As the Technical and Standards Director of the UK Fibreoptic Industry Association, Mike is heavily involved in the development of training and competence standards for the fibre installation industry and sets down policy in this area. In addition he chairs the audit and arbitration committees for the FIA. His book "Fibre optic cabling; theory design and installation practice" published in 1991 remains a reference for both experts and entrants into this field.

Mike also initiated the establishment of the Telecommunications Infrastructure Advisory Board (TIA-B) along with the relevant directors of its other host organisations CMA and ECA-ITEC.

In the UK, Mike is Chairman of TCT7, the BSI Technical Committee responsible for the three panels on telecommunication cabling. He also chairs two of these panels (TCT7/-/1 and TCT7/-/3) and is Secretary of TCT7/-/2. TCT7/-/1 and TCT7/-/2 act to assist development of European and international standards for the design and installation of telecommunications cabling respectively. TCT7/-/2 also manages the implementation of these standards in the UK, where necessary producing supporting national standards.

Mike is involved in CENELEC TC215 - as Convenor of Working Group 1 and Secretary of Working Group 2. These committees are responsible for the development of an integrated series of standards for the design and installation of telecommunications cabling in a range of premises. In 2008 he led the ETSI STF362 on energy efficiency in broadband deployment resulting in the ETSI TS 105174 series documents, allowing Mike to assist in a new TC215 activity covering data centre facilities and infrastructures (monitored in the UK by BSI TCT7/-/3).

At international level, Mike is Convenor of the Cabling Implementation Task Group (CITG) within ISO/IEC JTC1 SC25 WG3. This group is responsible for the strategic management of the international standards covering the specification, QA, installation, administration, operation, maintenance and repair of generic cabling. This work supports all the cabling design standards produced by ISO/IEC JTC1 SC25 WG3 including ISO/IEC 11801, ISO/IEC 15018, ISO/IEC 24764 and ISO/IEC 24702 for industrial premises produced by ISO/IEC JTC1 SC25 WG3 IPTG (also convened by Mike Gilmore).

Mike is a regular speaker at seminars and conferences in all five continents. He has provided the keynote address and opening presentation in many conferences in the UK, Germany and the Netherlands. His seminars, providing regular updates on the progression of cabling standards are particularly well attended and are operating in the UK and continental Europe.



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