Active Line Access and COTS

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Why is Ofcom promoting Ethernet ALA?

- Like most regulators, we prefer infrastructure access
- We are also promoting sub-loop unbundling and looking at duct access
- But these are unlikely to be viable everywhere – like LLU
- So some form of bitstream access is essential
- And the better it is, the more innovation will follow
- And the more consumers will benefit
- Other regulators are also looking at active line access type products
- But it is best defined by industry, not regulators

What should this mean for communications providers?

- The availability of a standardised wholesale access product sooner rather than later
- Giving easy access to fibre communities wherever they may be
- Supporting wholesale and retail products
- And allowing for differentiation in pricing, quality of service, security, applications etc
- The opportunity to compete in the superfast broadband market without major infrastructure investment

Key competitive requirements of Ethernet Active Line Access

Functionality	Justification	Technical requirements
Security enablement	• Secure delivery of services • Authentication of users	• Separate traffic streams • ALA-users implement own security
QoS enablement	• Satisfactory delivery of voice and video	• ALA-provider offers QoS information • ALA-user labels traffic
Multicast enablement	• Bandwidth savings in backhaul of one to many services (e.g. IPTV)	• Choice between ALA-provider and ALA-user implemented solution • Common interface • Static and dynamic support
Flexible customer premises equipment	• To allow CPs to innovate in CPE functionality	• Common Ethernet interface (initial) • Wires- / Fibre-only interface (future)
Flexible interconnection	• There is no universally economical interconnection point	• Local, regional, national interconnect • Common interface • Freedom to move

Comparison demonstrates the opportunities and challenges of standardisation:

Source of Specification	Security	QoS	Multicast	CPE	Interconnect
Swedish Urban Network Assoc			 Not considered	 Not considered	
Openreach GEA					
IFNL					
New Zealand Commerce Commission			 Not considered		
Malaysian Comms and Multimedia Commission	 Not considered		 Not considered	 Not considered	
Telefonica Espana			 Not considered	 Not considered	
Belgacom (info from BIPT)			 Not considered	 **No information**	
KPN			 Not considered	 Not considered	

Highlights – Operational Requirements

Key issue	Recommended standards or activity
• B2B systems and processes should be consistent with those for existing products	• Much of the time and investment that has gone into operationalising current generation access can be leveraged for next generation access • Ofcom encourages all industry stakeholders to engage in these issues via the relevant bodies, in particular, the Telemanagement Forum (TMF), to drive forward standardisation of operational aspects of ALA • In some cases, task groups could be formed to find specific solutions: defining best practice principles and file format standards • Ofcom currently carrying out an study to understand competitive implications of BtB interfaces ….
• A common ordering mechanism would facilitate trading between ALA-providers and ALA-users	
• End-users will expect a similar migration experience to current networks	
• The end-user experience and expectation must be carefully managed	
• Ethernet ALA requires an end-to-end service management platform	

Ofcom BtB Research Study

Overview

- Ofcom has commissioned CSMG to study whether BtB interfaces might represent a competitive bottleneck in NGA services, and to consider the key characteristics of an ideal BtB interface to support competition

Project Objectives

- Document and assess the existing Openreach EMP interface, effectiveness and likely evolution.
- Characterize the ideal BtB interface for an infrastructure provider offering wholesale access to CPs
- Consider the gaps between the existing EMP interface and the ideal interface, and undertake a high level cost-benefit analysis of these differences

Deliverables

Primary deliverable is a final report (in Word) encompassing:

- A review of the existing Openreach EMP interface
- A high-level mapping of the characteristics of the ideal BtB interface
- A comparison between EMP and the ideal interface
- Expected for September