Thank you for your communication dated 10th June 2010 requesting clarification on the requirement for DC resistance unbalance between pairs in a single cable.

There are no requirements for this parameter in the approved IEEE Std 802.3-2008, published amendments or draft projects underway. IEEE Std 802.3at-2009 sub-clause 33.1.4.2 does specify DC resistance unbalance between conductors within a pair for DTE Power (Power over Ethernet) applications.

IEEE 802.3 standards reference ISO/IEC 11801 for cabling channel performance and implementation, and we have a long-standing liaison relationship with the group responsible for this standard, ISO/IEC SC25 WG3. ISO/IEC 11801 defines generic cabling for a broad range of applications (i.e. not just IEEE 802.3 applications). We would therefore encourage you to liaise directly with ISO/IEC SC25 WG3 to clarify the need for DC resistance unbalance between pairs in a single cable.

Regards, David Law