



The Fibreoptic Industry Association

[www.fia-online.co.uk](http://www.fia-online.co.uk)

Secretary: Jane Morrison

The Manor House  
BUNTINGFORD  
Hertfordshire SG9 9AB  
United Kingdom

Tel: +44 (0) 1763 273039 Fax: +44 (0) 1763 273255

e-mail: [jane@fiasec.demon.co.uk](mailto:jane@fiasec.demon.co.uk)

## TELECOMMUNICATIONS INFRASTRUCTURES DOGGED BY COMMUNICATION PROBLEMS

by

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

A recent survey of contractual problems in telecommunications infrastructures uncovered a worrying level of disputes resulting from a lack of relevant information being provided to the installers. The sources of this failure were two-fold. Firstly, requirements that had been clearly defined and documented by customers had subsequently not been included, or had been incorrectly translated or modified, in the tender document produced by the customers consultants. The second area of concern pointed to a failure in sub-contracting chains to provide the correct tender documentation to those undertaking the work. Both of these factors are symptomatic of a more fundamental problem - a lack of direct communication between the end-user and the installer.

In the "good old" days, customers defined their own needs for the IT infrastructure and used the services of specialist consultants or the suppliers of IT equipment to identify potential installers. Installers were then generally free to discuss the small, but critical, details of the installation requirements directly with the customer - identifying incompatibilities and information shortfalls. This approach is still applied for many of the large/very large enterprise installations. However, the survey found that such installations were comparatively problem free. Instead, the difficult, and sometimes, irresolvable cases lay in the domain of the smaller installations covering everything from universities to hospitals where the infrastructure specification was handled by non-specialist consultants and the installation of telecommunications infrastructures lay at the bottom of a multi-disciplinary sub-contract chain.

Before going any further, it may be appropriate to describe what is meant by "difficult" cases. Typical situations include cabling systems that meet the required transmission requirements but are rendered non-functional, non-maintainable or irreparable due to non-agreed installation decisions. One major and common cause of non-functionality is where an installer, having no other information, defines cabinet lay-outs. This can result in lack of space for the required transmission equipment or a lack of cooling/ventilation being provided to it - which amounts to the same thing. However, it is dangerous to focus on one specific aspect because the fundamental problem of communication needs to be addressed.

Many years ago a senior infrastructure consultant advised an FIA gathering that, in his view, the role of a consultant was to act as a barrier between the end-user and the supplier. After the resounding chorus of "sharp intakes of breath" subsided, FIA members attempted to point out that, while no customer likes to be hounded by competing potential suppliers, the situation following contract award should be completely different. The consultant should enable direct communication between those paying for the installation and those performing it. Based on the evidence of the current survey, this approach has clearly not been adopted.

The applicable British Standards including BS 6701 and the BS EN 50174 series define the required contents of installation specifications and also mandate quality plans produced by the installer which explain how those specifications are to be met. The critical point is that both the installation specifications and the quality plan are required to be agreed between the customer (or their representatives) and the installer - before the installation commences. Two fundamental questions must be answered by all end-users - firstly, do the specifications produced on your behalf meet the requirements of the applicable standards and, secondly, do you wish to delegate acceptance of installers proposals to the sub-contracting chain. If the answer to either question is "No" then something needs to be done, and quickly, or your next installation will be added to the list ready for inclusion in the next survey.

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](mailto:jane@fiasec.demon.co.uk) or, alternatively, you can contact the FIA Secretariat in 01763 273039.