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A warm welcome to the following NEW MEMBERS

Corporate

473 - Powertech Limited

474 – Raccord Limited

Personal

472 – David Robinson

New look Newsletter

As many of you read this Newsletter "on-screen" we have adopted a single column format. We hope that this makes life easier. Comments to the FIA Secretariat please.

Checking Qualifications or Looking for a Job?

The FIA's **SkillsMatch** page on the Association's web site is going from strength to strength. This unique initiative allows personnel holding relevant qualifications in fibre optic technologies to record their achievements on our web-site database, thus enabling employers to undertake checks on-line. It also offers a powerful medium for those seeking employment and for companies looking for staff with specific qualifications.

With details located at www.fibreoptic.org.uk/efiasvrql.htm, the first section of the scheme is open to members and non-members alike and forms a comprehensive register of qualified personnel in various fibre optic disciplines. The information includes the names of the personnel, their date of birth, qualifications, certificate details, and the name of the organization that carried out their assessment. Hyperlinks to the "assessors" sites are included if they are FIA members. The second section is accessible only by FIA members and provides a simple, cost-effective means of allowing qualified personnel who are seeking employment to advertise their availability for work.

The FIA believes the scheme will become a major element in the recruitment of fibre optic professionals. All those on the database are kept advised about future FIA seminars and other training initiatives that may be of interest and for which they may qualify for discounted rates. A further benefit is that **SkillsMatch** is linked to the "employment area" on the web-site that allows FIA members to advertise their employment opportunities. So if FIA members wish to advertise for staff, a close bond can be formed between the two areas.

Qualified personnel can register their details with **SkillsMatch** for an annual fee of just £25 plus VAT. The FIA Secretariat will be happy to help those interested or the details can be completed on the downloadable Application Form.

FIBREOPTIC INDUSTRY ASSOCIATION

The FIA is a Company Limited by Guarantee

Management Council

Mike Phillips - Chairman
(*Fibre Optic Solutions*)

Andrew Watson - Vice Chairman and Commercial
(*Molex Premise Networks*)

Mike Gilmore - Technical Director and Treasurer
(*The Cabling Partnership*)

Industry Sector Directors

Paul Bateson - Test & Measurement
(*Optical Test and Calibration*)

Stuart Smith - Training and Qualifications
(*Cabling Science Ltd.*)
Installation

John Cupitt - (*Dwellight*)

Peter Thompsett - (*Ensign Communications*)

Steve Strange (*Anixter (UK)*)

Paul Taylor - (*AEC*) Co-opted

New FIA Publications on the Web

The following documents are to be published in December 2001:

- TSD-2000-5-1: Optical Power Safety Levels;
- TSD-2000-5-2: Optical Fibre - Handling of Processing Chemicals;
- TSD-2000-5-3: Optical Fibre - Disposal of Waste.

All three documents have been developed following numerous requests by members for information on the three subject areas.

The first is significant in that this is the first document, world-wide, that clearly defines the required safe installation and operating practices for optical fibre cabling infrastructures. The document provides a readable interpretation of the long-standing IEC 60825 series of standards as they apply to typical environments encountered by FIA members. The contents of the document will undoubtedly take many by surprise and suggests that most requirements for optical power safety are ignored in the vast majority of commercial cabling installations.

The other two documents, **TSD-2000-5-2: Optical Fibre - Handling of Processing Chemicals** and **TSD-2000-5-3: Optical Fibre - Disposal of Waste** are useful guidelines and should form the basis of installers methods statements covering these areas.

New Work Starts on 'Testing' Documents

Following on from the successful Breakfast Seminar delivered by Mike Gilmore, FIA Technical Director in October, the FIA is pleased to announce the development of two very important Technical Support documents. Both cover the measurement of attenuation of installed cabling.

The first, **FIA-TSD-2000-4-2-1**, covers the use of light source and power meter (LSPM) equipment. The document defines the conventional test methods that have been standardised and harmonised for many years in the US, UK, Europe and international level. The document proceeds to discuss the changes required following the introduction of duplex test systems and SFF connecting hardware. The document will explain the true level of measurement error and the impact of this error when short systems (now more commonly seen within buildings) are tested.

The second document, **FIA-TSD- 2000-4-2-2**, will be started upon completion of the first TSD and will address the use of OTDRs.

BICSI – No Substitute for C&G 3466!

In advance of a meeting with Jay Warmke, Executive Director of BICSI, on his recent European tour, the FIA Council reviewed the BICSI Installer qualifications against the content of the City & Guilds 3466 qualifications. It was decided that, while the BICSI Installer scheme had certain benefits, it failed to provide an adequate substitute to the C&G qualifications. Jay Warmke accepted our position and said that the UK was fortunate to be uniquely placed with respect to the optical fibre installation qualifications sector.

However, as readers of this Newsletter will know, the FIA feels that the City & Guilds qualifications are in need of revision and restructuring. The FIA proposals regarding the changes to the 3466 series of qualifications were very well received at a meeting with C&G in October. It would appear that the C&G qualifications will be redeveloped as:

- 3466-xx: Optical Fibre inside buildings (multimode and singlemode);
- 3466-xx: Optical Fibre outside buildings;
- 3466-xx: Copper inside buildings (largely to serve the LAN environment);
- 3466-xx: Copper outside buildings (largely to serve the WAN environment).

The FIA has also suggested a low cost migration path for those who already have an existing 3466 qualification.

In order to address concerns regarding the quality of training related to lack of facilities and specialist equipment provision in certain approved centres, it was agreed that the new qualifications should provide the option of allowing some of the approved centres to concentrate on the "theory" aspect of the qualification.

www.fibreoptic.org.uk

the fast route to obtaining the latest FIA news

This theory part of the qualification would then fit in nicely to the underpinning knowledge requirement of other non-C&G qualifications. This work is expected to be undertaken on a fast-track basis in early 2002.

£4,000 raised at CableNet golf day for victims of terrorist attack on New York

£4,000 was raised for the victims of the terrorist attack on the World Trade Centre in New York when an impromptu auction was held at CableNet Training's annual golf day.

The event held at Wokefield Park Golf Club, Berkshire, took place just 48 hours after disaster struck the Twin Towers and the 50 golfers unanimously voted to raise funds for the victims and their families.

Andrew Stevens, CableNet's sales and marketing director said: 'Like everyone, we just wanted to do something to help those caught up in the unimaginable events on the 11th. We will be donating the money raised direct to a fund set up for the victims and their families.'



FIA AGM

The AGM starts this year at 11.30 a.m. on 5th December 2001 and the FIA is inviting AGM attendees to join the Council for buffet lunch at The Saracens Head, Towcester, Northants at 12.30 pm.

Members should note that a fax-back slip was sent out with the AGM paperwork to all members so they can confirm their attendance at the AGM and the buffet lunch. If you haven't seen it, please call the FIA Secretariat.

The AGM provides members with an opportunity to hear about the FIA's achievements and future plans. Most importantly, attendees will have an opportunity to express their own views on the Association's work as well as making proposals about new areas the FIA can address.

This Newsletter is provided as a means of maintaining communication between and with our Members.

It can, therefore, promote the activities of Members to other Members. Articles, product information, news items etc. are always welcome.

Please send the information via email (jpg illustrations) to Roy Atterbury via roy@attassoc.demon.co.uk

ECOC 2001 - Amsterdam

This year's European Conference on Optical Communications (ECOC) was held in Amsterdam at the beginning of October – Richard Ednay, Technical Director of Optical Technology Training, a FIA member, sends us this special exclusive report.



He writes:

Undoubtedly ECOC is the most important fibre optics event in Europe. The conference is now in its 27th year and the latest event attracted 2000 delegates from 43 countries. And the exhibition that runs alongside the conference has mushroomed in size in recent years. Despite the general economic situation, this year's show was a sell out with more than 350 exhibitors. This is fibre optics on a scale that has never been seen in the UK. The event moves around from year to year - last year it was in Munich, next year it will be in Copenhagen.

Amsterdam is an attractive city with good public transport and cycle paths everywhere. I decided to travel the Dutch way and hired a traditional Dutch bike for the week – it proved to be the quickest and most efficient way to travel because almost everywhere is with 20 minutes cycle ride.

My primary objective in attending the conference was to keep up-to-date with all the latest developments in fibre optics and optical technology. It is important that we ensure that our training courses reflect the constantly changing nature of the industry in order that we can anticipate the trends that will determine future training needs. It is, of course, also an excellent place to keep in touch with old friends and acquaintances from nearly 20 years of working in the fibre optics industry.

Conference Highlights

Some of the conference highlights included the opening session which looked forward to the technologies that will be a part of communications networks in 10 and 20 years time. On these time-scales, it appears that we may approach the theoretical bandwidth limitations of current optical fibres with data rates of hundreds of Terabits – certainly, all optical networking will be a reality with optical packet switching. Optical signal processing and basic computing functions are also feasible. Another tutorial later in the week

discussed quantum communications and the concepts of teleportation. There were also many interesting presentations and workshops on more immediately relevant issues including the forthcoming 10 Gigabit Ethernet standard, long wavelength VCSELs, PMD, Raman Amplifiers, plastic fibres etc. In fact there were about 600 presentations in all!

The post deadline papers included the usual "hero" experiments with everyone trying to outdo the rest. Systems were described with multi-Terabit transmission over thousands of kilometres and hundreds of DWDM channels. All sorts of tricks are needed to achieve these tremendous feats – and these will form part of our *Understanding Next Generation Optical Networks* course.

Exhibition highlights

With so many exhibitors at the show and with time at the conference it was difficult to get around everything – I didn't win the Smart car, nor any digital cameras, MPEG players or anything else that was on offer. The range of exhibits was quite amazing with everything from connectors and ferrules to factory automation systems capable of building complex optical subassemblies including stripping, cleaving and splicing fibres.

There were new products launched for the first time in Europe such as the new Furukawa Fitel S176 splicer with its 11s splice and the Nexus polarisation mode dispersion analyser from Perkin Elmer, available through NetTest.

Social Highlights

There was also a social programme for conference delegates that included welcome drinks at the conference centre, a reception at the University, a concert and the conference dinner held in the Beurse de Berlage – the former stock exchange. And there was the Fibre Systems Europe party at the zoo and Amsterdam's other interesting areas.

Anyway see you next year in Copenhagen for the event that promises to be "probably the world's finest".

The FIA want your "industry snaps"

We are having a few problems in locating suitable industry related pictures to accompany FIA articles etc. Our PR contact has suggested that some of the FIA Corporate members may be able to provide a small selection of photographs that we can keep on file for this purpose. Any fibre related photos, product shots, on-site shots or installation shots would be gratefully received. Any picture used will obviously be credited to the particular company.

If you able to assist the following format is required: jpeg files (300 dpi) (via email) or preferably on a CD - in tiff or eps format (300 dpi). Please contact Nigel May - Nigel_May@parkfield.co.uk

LAN Application Support Guide

Don't forget about the *FIA LAN Application Support Guide* (free to members, £150 to non-members) which introduces the concept of optical fibre cable categories in support of the international and European standards. The Guide is now available for members to [download free of charge](#) from the 'members' (password protected) area of the FIA web site.

For Sale – Cleaver & Gas Detector

A small fibre optic jointing operation would like to sell two pieces of equipment which are now surplus to requirements. Any offers will be considered. One item is a gas detector and the second is a Fujikura fibre optic cleaver. The cleaver is as good as new since it has only been used on two 144 fibre joints. If any reader is interested, please call Clark Russell Tel: 01698-540501.

December Breakfast Seminars – The New Singlemode Technologies

To mark the end of a very successful series of FIA Breakfast Seminars for 2001, the FIA has arranged for an excellent presentation to be provided by **David Tanis** of Lucent Technologies (OFS BrightWave) from Dublin. The topic will be "**Advanced Fibre Types for the All Optical Network**" and will explain the differences between the various singlemode optical fibres and how they benefit the applications to be supported over them. This is a particularly important area as even LAN applications are beginning to mandate the "new" singlemode solutions.

As a "dessert" for this excellent "main course", Mike Gilmore, FIA Technical Director, will discuss the FIA plans for the development of a users guide for the installation and specification of "dark fibre".

The seminar will be held at **Bisham Abbey, Berkshire** on the **4th December** and the **Hilton Airport Hotel, Edinburgh** on the **11th December**. *Costs for each Seminar are just £45 + vat for FIA members (£125 + vat non-members). Contact the FIA Secretariat for full details.*

Training Courses by OTT

Forthcoming training courses arranged by OTT include:

- **Fibre Optic Cabling for Datacomms (Multimode) City & Guilds 3466-02**
 - 10-14 December 2001; Skipton, N.Yorks
- **Fibre Optic Cabling for Telecomms (Singlemode) City & Guilds 3466-03**
 - 3-7 December 2001; Skipton, N.Yorks
 - 10-14 December 2001; Skipton, N.Yorks
 - 17-21 December 2001; Skipton, N.Yorks
- **Introduction to IT Cabling Projects (Fibre)**
- **Understanding Next Generation Optical Networks**

For details, call 01756 797155, visit www.ott.co.uk or e-mail Chris@ott.co.uk.

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Please send the information via email (jpg illustrations) to Roy Atterbury via roy@attassoc.demon.co.uk

FIA Endorsement for Conference

The FIA has agreed to endorse an optical networking event in 2002 which is called *AON/GMPLS/Optical Service Provisioning*. It forms part of a 'Transmission' portfolio of events, and will be taking place in Lisbon, Portugal on 4-8 February 2002. It will consist of 2 days on *Migrating to All Optical*, 2 days on *Optical Service Provisioning* and a one day *GMPLS Briefing* in between. Further details from www.telecomstransmission.com/aon or www.telecomstransmission.com/opticalprovisioning.

FIA Breakfast Seminar Review

FIA Commercial Director Andrew Watson reports on the October events.

Installation Testing Practices - Are you in control? 18th October 2001 Bisham Abbey, presented by Mike Gilmore, FIA Technical Director and Senior Partner of The Cabling Partnership.

From observations within the industry, it is apparent that the correct procedures for testing channels and links are regularly being either ignored or not carried out correctly. The situation has worsened following the introduction of dual light source/power meters and the range of duplex (including SFF) connectors. Many people responsible for testing network installations were unsure of the correct practices that should be adopted. Difficulties have also arisen from test equipment that provided a pass or fail mode.

Mike's presentation encompassed all these issues and provided practical solutions to the problems encountered. In addition, because the timing of this seminar followed the latest ISO/IEC cabling standards meetings, Mike was able to provide the audience with the very latest update on proposed fibre optic cable classes that had in fact changed since the last seminar.



There were a good number of delegates from a variety of organisations that provided for interesting discussion on this and many other issues in the industry.

Enhanced Bandwidth Optical Fibre Cabling 11 October 2001 Edinburgh

To enable our Scottish members to benefit from the breakfast seminar programme, a seminar was organised and held at the Hilton Hotel Edinburgh Airport. Two presentations were made that complemented each other very well.

The topics concerned the options and implications of Gigabit Ethernet networks. **Tony Buckingham** of **Nexans** approached this from a "practical" point of view illustrating the key elements with the use of interactive slides. This provided delegates with a good visual understanding of some of the more complex issues concerned with high-speed networks. An example of this was the effect different launch conditions have on fibres and the need to ensure that the right cable is specified for the correct application.

Following this **Mike Gilmore**, FIA Technical Director and Senior Partner of The Cabling Partnership, gave a presentation that highlighted the activities by the standards bodies and the impact this will have on installation procedures and practices. Those involved in considering design options will need to be aware of the proposed optical fibre classes when deciding which cable will meet the desired transmission range for high speed network applications.

The delegates expressed considerable interest in the topic with many questions being asked.

Training Update

The following forms part of an article prepared for the *Professional Electrician* by the FIA's Training and Qualifications Director Stuart Smith

Lack of suitably skilled people is one of the most frequently mentioned obstacles to growth in the communications industry. As technology advances, so training schemes must be updated or risk becoming obsolete and discounted. The FIA is committed to ensuring that any training scheme it supports will meet the needs of its members and the wider networking community.

Historically, the FIA has supported both the DTI-sponsored National Vocational Qualification (NVQ) scheme and the City & Guilds courses. A number of NVQs, awarded upon demonstration of competence and assessment of underpinning knowledge, are relevant to the fibre industry. However, largely as the result of a combination of perceived cost, administrative overhead and a continually changing series of requirements, the uptake of these qualifications has been disappointing. In comparison, the City & Guilds 3466 series of qualifications, which examine both knowledge and basic competence (albeit in a controlled environment), have been very successful with many thousands of certificates having been awarded.

The FIA has conducted in-depth reviews of both schemes and has concluded that both systems are in need of modification to meet the future requirements of our industry.

The policy of the FIA is to:

- recognize the NVQ and City & Guilds schemes obtained to date (see the FIA's SkillsMatch service);
- monitor the development of NVQs and related qualifications under the auspices of the relevant National Training Organization;
- work to update the City & Guilds qualifications to more accurately reflect the needs of the industry.

The FIA is keen to work with the City & Guilds organization to address the approval and policing of training/assessment organisations offering the qualifications. We would also like to see the introduction of "assessment only" certification, enabling the qualifications to be more easily obtained by experienced but unqualified engineers. The FIA is also interested in a "valid competence" concept to ensure that the skill set attained is used on a regular basis (see the BICSI article in this Newsletter).

Calling all FIA Training Providers

Please ensure that you update your details on the FIA Web Site as regularly as possible. It is a valuable resource on the site which is accessed many times each day. Both Approved and Non-Approved Training Providers are featured. The original printed guide to FIA Training Providers has been replaced by the web site guide.

Club Optique

The Club Optique is the FIA's sister association in France. There is a constant interchange of ideas between the two groups and this regular round-up of Club Optique events is complemented by information about the FIA contained in the Club's own Newsletter.

Club Optique participated, with the FIA, in the OPTO 2001 exhibition in Paris during October. The last monthly meeting of the Club was held at the premises of Tyco Electronics France that are based near Pontoise. A number of presentations from Radiall, Keopsys, TDO Fibre Optique, and Itochu Fujikura all concentrated on the maintenance of polarisation in terms of the general principals, optical connectors, and measurement.

In addition, the meeting looked at the impact, or otherwise, of such shows as Networkd+Interop 2001 in Paris and ECOS 2001 in Amsterdam. The event also included a presentation on the formation of DA-LightCom and a review of the company's products.

The Club can be contacted at the following email address: jm.mur@tycoelectronics.com

Press Watch

A number of interesting items have appeared in the trade publication *Network News* which readers in the FIA might have missed.

Scientists at Lucent's Bell Labs, for example, have announced that a single strand of optical fibre could transmit 10 times more information than had previously been thought. This discovery extends the theoretical limits of how much data the optical fibre backbone will be able to carry.

The research teams are suggesting that it may be possible to send around 100 Terabits/s of information (or roughly 20billion 1-page emails, simultaneously per strand of fibre without excessive interference. Most commercial systems can send under 2 Terabits/s but Bells Labs experiments have already transmitted 10 terabits/s.

Prices for Ethernet switches have dropped so much over recent months, that they have now become a top choice for increasing bandwidth on congested networks.

It appears that parts of London, Birmingham and Manchester have been designated as **'no go' areas for high-speed wireless Lans (Wlans) and DSSS-based point-to-point links**. A survey has shown, for example, that commercial areas of London around Oxford Street, Grosvenor Square and Long Acre can no longer support any more 11Mbs systems. A list of the problem areas can be seen on the Wireless CPN website www.cnpgb.com.

A team from Wurzburg University and the Alcatel Research Centre has developed a **technique to combine four distributed feedback lasers into a single monolithic structure**. The process offers the possibility of a simpler means of sending multiple wavelength singles down a single fibre.

Fed-up With Sex, 'Special' Offers and Confidence Tricksters?

Although unwanted email has to be dealt with in association with your service providers and other route, this does not stop the flow of unsolicited telephone calls and faxes – many of which are a pain, some are embarrassing, and others might lead to costly telephone bills.

But it is easy to stop these within 28 days of taking action. If you do not want unwanted sales call, contact the Telephone Preference Service on **0845 070 0707**. For unwanted faxes, call **0845 070 0702**.

Once your request gets into the system, then it become ILLEGAL for people to bombard you with unwanted offers etc.

French Student Wants UK Experience

Xavier Bouteiller, a French engineering student at the ENSI-Caen (Ecole Nationale Suprieure Ingnieurs) is required to spend a period of 6 months in industry from March to September 2002 in order to complete his course. He is asking whether any FIA member is willing to provide training.

He intends to be a general-purpose engineer specialising in the field of the optical instrumentation.

He has chosen the UK to further improve his technical English and to experience the English working culture (he has already had work experience in Germany and in France.) He would also like to put his present skills and experience to work on a suitable project in a UK company. His contact details are bouteill@ensicaen.ismra.fr

Furukawa Teams Up With OTT

The fusion splicer department of Furukawa Electric Europe Ltd has selected Optical Technology Training as its exclusive training partner. The new agreement, which was signed at this year's ECOC Exhibition in Amsterdam (October 2001), underlines Furukawa's on-going commitment to the provision of leading-edge training and development programmes for all its customers.

Fusion splicing is an important aspect for successful installation of fibre optic cabling and for the production of photonic assemblies. It is essential that users have the necessary knowledge and skills to prepare fibres correctly and to operate equipment proficiently. This way optimum performance and reliability of a splicer can be assured.

Kunio Ino, Managing Director of Furukawa, commented on the new agreement: "We are delighted to be working alongside a leading training company within the fibre optic industry and we see training as an important extension to our overall product offering to all our customers."

Furukawa will be offering a range of OTT's courses to its customers at all levels, and for all applications. These will include introductory courses on fibre handling and fusion splicing in a production environment, through the industry standard City & Guilds 3466 professional installers course; and advanced courses on ribbon fibre splicing and next generation optical networks.

For further information on OTT, visit www.ott.co.uk, email sales@ott.co.uk or call 01756 797155. For further information on Furukawa, visit www.furukawa.co.jp or www.furukawa-fitel.co.uk, email: sales@furukawa.co.uk or call 020 7313 5320.

TRITEC offers new mounting system for TC A8 Optical Fibre Cleaver

A leading provider of fibre optic installation and splicing equipment, TRITEC Developments, is launching a new mounting bracket to complement the TRITEC TC A8 Optical Fibre Cleaver.

The new enhancement enables the TRITEC TC A8 to be mounted at an ergonomic angle at the front of the FASE II fusion splicer to allow for "hands free" operation and providing added flexibility and efficiency for the user.

The announcement comes just weeks after the launch of the new precision cleaver - TRITEC TC A8 - designed to produce fast, high quality cleaves for cost effective fusion splicing. It produces smooth, flat, perpendicular (less than 1.0 degree) fibre end faces that are essential in low-loss fusion splicing. The TRITEC TC A8 cleaves all singlemode and multimode, 250µm and 900 µm coated fibres without adjustment, and with one simple stroke. Its compact design means it is ideally suited for the fibre installation environment where portability is crucial.

For further information about TRITEC Developments please visit its website at www.tritec-dev.com or call 01925 220466.

Guide to Forthcoming Shows and Conferences

Lightspeed Europe 2001 Earls Court, London 3-5 December 2001.

Supported by the FIA

Visit www.lightspeedeurope.com

FIA Breakfast Seminar - The New Singlemode Technologies 4 December 2001 (Bisham Abbey), 11 December (Edinburgh)

Contact the FIA Secretariat.

FIA Annual General Meeting - 5 December 2001 at Saracen's Head, Towcester.

Understanding Transmission Technologies London 5th December 2001 Call Vision in Business (see below)

Distributed Network Intelligence in Next Generation Networks London 18-20 December 2001.

Conference and workshops. Contact Vision in Business (see below).

Layering vs Layering - Towards the Next Generation Network London 24-25 January 2002.

Call Vision in Business (see below)

3rd Annual Optical Switching Summit Paris 30-31 January 2002

20% (OR MORE) DISCOUNT FOR FIA MEMBERS

Contact Vision in Business (see below).

Marketing Forecasting & Revenue Modelling in Telecoms London 29-30 January 2002.

Call Vision in Business (see below).

AON/GMPLS/Optical Service Provisioning Lisbon 4-8 February 2002.

Endorsed by the FIA

2 days on *Migrating to All Optical*, 2 days on *Optical Service Provisioning* and a 1day GMPLS briefing in between.

Further details can be obtained by visiting either www.telecomstransmission.com/aon or www.telecomstransmission.com/opticalprovisioning.

How Telecoms Technology Works – Training Courses Run by Optical Technology Training London 13 February and 28 May 2002. Contact Vision in Business (see below).

ARABCOM 2002 Qatar 21-23 April 2002.

Visit www.arabcom.com for further information.

CeBIT Satellite, Broadcast, Cable & Networks – International Trade Fair Shanghai 29-31 May 2002.

Contact Annette.Levy@messe.de for more information

Online Conferences for the European Telecoms Industry. Vision in Business has introduced a new initiative that allows users to access conferences of their choice via their computer. Speakers and presentations from many areas of the sector are available featuring both presentations and slides. Virtually every topic is covered. For a free demonstration, visit www.onlineconferences.net (or see below).

NOTE Vision in Business can be contacted on 020 7256 5188 Email: bookings@visioninbusiness.com or visit www.visioninbusiness.com

Advertising on the FIA Web Site

As an FIA member, your company is automatically promoted on the site. Free access to the membership search pages for all visitors to the site provides complete details of our members and the services and products that they offer.

The site is extremely popular and is often the first port of call for FIA enquiries via the Secretariat. Recent figures received from the server show that the site receives around **20,000** requests for information per month!

The comprehensive statistics relating to visitors to the site are regularly updated and can be checked out by visiting www.fibreoptic.org.uk/logfile.html.

Many areas of the site are available to members who wish to advertise their products and services and several of these have already been taken up. A list of the pages available is provided below together with the highly competitive rates for the space.

The advertisements can consist of a company logo or text (or both) but must be within the size of 80 x 80 pixels. The advert will appear at or near the top of the relevant page. All prices quoted are for 12 months advertising - representing excellent value for money!

If you have a particular page you wish to reserve (there are only 16 pages available!) contact the FIA Secretariat. We will then send you instructions on how to send your advert to our webmaster together with our invoice for the relevant amount.

Individual pages: The following pages are available **NOW**.

Join the FIA	£150
FIA Links	£150
FIA Membership Search Engine	£150
FIA Policy Statements	£75
Audit Scheme	£75
Employment	£75
e-Services	£75
Events	£75
FIA Membership Fees	£75
Insurance Scheme	£75
Arbitration Scheme	£75
Mart	£75
FIA SkillsMatch	£75
Standards Forum	£75
Approved Training Provider Scheme	£150 (<i>available only to FIA Approved Companies</i>)
Approved Installer Scheme	£150 (<i>available only to FIA Approved Companies</i>)

The prices shown are for a 80x80 pixel advert which will appear at or near the top of the relevant page. All prices are net of VAT and cover a 12 month period.