



PRESS RELEASE

Free space optical wireless trials nearing successful completion

London, 17 February 2003 - UK Free Space Optical (FSO) leader, CableFree Solutions, is nearing the successful completion of its latest series of European trials with a number of wireless and fixed-line operators, aimed at evaluating the effectiveness of FSO systems to support network backhaul in 2G, 2.5G and 3G scenarios. Several of these operators plan to switch to live FSO deployments during Q3/Q4 2003 to help meet their next-generation network roll-out demands.

As well as meeting the increasing bandwidth demands of new services such as MMS, video streaming and mobile Internet, the FSO solutions on trial support rapid network roll-out, having no licensing requirements in addition to low capital and operating expenditures. These factors help to meet the coverage and capacity stipulations of costly 3G licences.

The trial installations, operating at ranges from a few hundred metres to over 2km line-of-sight (LOS), include GSM microcell connection, with 2xE1 or 4xE1 capacity solutions enabling daisy-chain links from base station sites back to the MSC. For 3G interconnect, CableFree's 155Mbps solution is being trialled and offers particularly rapid roll-out timeframe. A differentiating feature of the company's FSO line is the ability to upgrade products from E1 to 155Mbps in the field, in a matter of minutes using plug-in modules, increasing flexibility and preserving investment, as 'future-proof'.

The CableFree FSO family has already passed stringent interoperability tests with GSM and GPRS equipment from leading vendors such as Alcatel, Ericsson, Motorola, Nokia and Siemens, with flying colours.

"CableFree's flexible FSO solutions are protocol-agnostic and can connect with any network type, be it GSM/GPRS, CDMA, Wi-Fi, 3G and beyond," said CableFree Technical Director, Stephen Patrick. "FSO is an instant solution to the transmission demands of new bandwidth-

hungry services," Patrick added. "It is the 'Instant Connection' FSO offers that operators now see as crucial in maintaining pace of network expansion and customer service"

FSO's high reliability does depend on regional atmospheric trends, which are experienced across the geographic spread of the current trials. In northern Europe, thick fog limits the range for reliable 99.999% service to under 1km. In southern regions, such as Greece, Italy and Turkey, FSO has been demonstrated to offer 'five nines' availability up to 2km.

"FSO offers complementary properties to microwave (MW) radio, with fog, rather than rainfall, as the dominant fade mechanism. Under 4-5km, FSO is not affected by rain, smog, haze, dust or other moderate climatic factors," Patrick concluded.

For Carrier applications, CableFree has developed sophisticated deployment planning tools with atmospheric data for over 2,700 locations worldwide using up to 10 years of measurement data, which ensures service level agreements can be met.

Elsewhere in the world, CableFree FSO is already in widespread use for wireless backhaul under tough conditions, with leading carriers such as China Mobile, China Unicom, numerous Vodafone Group companies, Nextel and Cricket PCS in the US, and Egypt's Mobinil all opting for CableFree. Leading UK operators are currently trialling FSO as a suitable option to complement MW over short ranges for their 3G roll-outs. In the UK, two operators are already established users of CableFree FSO solutions, which are used to link their corporate backbone/enterprise networks across some of the UK's busiest cities.

-ends-

N.B. Both CableFree Solutions™ and CableFree™ are trademarks of CableFree Solutions Limited. The graphical representation of buildings connected by beams is a Registered Trademark of CableFree Solutions Limited.

NOTES FOR EDITORS -

Photography is available to support this release

About CableFree

CableFree Solutions is an independent company which designs, manufactures and markets a range of free-space optical communications systems based on Laser/IR technologies, which are capable of transmitting full-duplex voice and data across uninterrupted free space at distances from 200m to 4km, and at rates from 2Mbps to 2700Mbps. Unlike radio-based systems, CableFree's wireless solutions require no licensing, planning permission or excavation work for operation and take less than three hours to install.

CableFree systems are designed with a large fade margin which ensures signal integrity against extremes in weather and atmospheric conditions and high availability levels from 99.7% to 99.999% depending on distance and location.

All CableFree systems are upgradeable, which is a feature not available in competitive solutions. With a simple card swap Ethernet links can be upgraded from 10Mbps to 100Mbps fast Ethernet, ATM from 155Mbps to 622Mbps to carry all forms of multimedia traffic, including voice, data, video, or a combination of telephony and data in configurations including 10 + 2Mbps and 100 + 2Mbps.

Telecoms links can be upgraded from 2Mbps E1 to 8Mbps or 4x2Mbps, E3, STM-1 and above.

As well as the new CableFree 2.7 Gigabit, the company's products include the CableFree Gigabit, the CableFree 622 for data rates of 2 to 622Mbps over distances up to two kilometres; CableFree 'Access', offering telecom providers cost-effective solutions from 2 to 155Mbps up to four kilometres, and the short-range CableFree LaserHop, offering 2 or 100 Mbps for hops of around 200m. Applications include GSM microcell interconnect.

CableFree offers extensive support of both proprietary and standards-based network management systems for all of its products.

Telecoms interfaces available include: G703 E1/CEPT, E2, E3, T1, DS-3, STS-1, ATM/Sonet/SDH STM-1 and STM-4. Data networking interfaces available include: Ethernet, Token Ring, Fast Ethernet, Gigabit Ethernet, FDDI, Fibre Channel, ATM-155 and 622.

A wide range of broadcast TV and CCTV security interfaces are also available.

For further details contact:

Penny Lee

Director

CableFree Solutions

Tel: +44 20 8941 7975

E-mail: penny.lee@cablefree.co.uk