



**Nokia 7650—  
Camera phone  
with Colour Screen**

# Mobile Communications

**Issue 2  
August 2002**

## A Monthly Newsletter from Wearside Communications

### Third Generation Mobile Phones, 3G, hits snags

In 2001, five 3G licences were auctioned to BTCellnet (O<sub>2</sub>), Vodafone, Orange, One2One (T-Mobile) and newcomer Hutchison 3G (do you remember their failed Rabbit phone system?). 3G will allow super-fast internet access by mobile phone and colour picture and video sending and receiving. There are already severe doubts in the industry that the billions spent on the licences will be recouped - building the infrastructure may cost as much. Much of what 3G will bring is already here with GPRS technology. Telefonica of Spain and Sonera of Finland have already written off the £5.5 billion they spent on a German 3G licence. Technical difficulties have plagued Hutchison 3G and their planned launch by the end of the year may not have the capability it anticipated. Now Hitachi has warned that the technology may well overload the internet and a new internet address system will be needed if it is to cope. Further, sources believe that billing for 3G will be a nightmare. On the positive side, an O<sub>2</sub> prototype 3G system is running well on the Isle of Man and most networks plan to launch in 2003.

### Texts hit a billion

Mobile texts in June reached a staggering 1.3 billion in the UK, helped by Big Brother interactive voting. 45 million texts were sent each day, compared with 32 million in June 2001. With texts costing around 10p each, you can imagine how much the four networks are raking in. Texting is set to soar further with the advent of MMS technology (see story below).

### Multi-Media Texting

Mobile texting is about to go through a bit of a renaissance with the advent of MMS (multi-media messaging services). MMS will enable the sending of images, colour, animation, audio and text. Eventually, video will also be able to be sent.

Charging will, as usual, be a mixture of cost per message (Vodafone, O<sub>2</sub> and Orange) and all-inclusive fixed cost (T-Mobile). Currently, GPRS technology will be used to transmit the messages but eventually 3G will be the system preferred by the networks (they need to recoup some of the £23 billion or so they spent on their 3G licences. O<sub>2</sub> plans to release MMS in the Autumn. Cost is expected to be around 30p per message.

Mobiles ready to use the new technology are the Nokia 3510, 7650 and 6610, the Ericsson T68i and PDAs.

### 3D Lara in your pocket

PDA (Personal Digital Assistant) users will have access to 3D games for the first time as the original Tomb Raider video game is released on windows based PDA, such as the XDA. The game has been developed by Ideaworks3D and benefits from its Segundo technology, which enables console quality gaming on mobile devices.

### Two new members for Wearside

As part of our growth in the small business sector, we have recruited **Martin Skirving** to Business Sales to work alongside **Lee Bromham**. Martin joins us from Genesis Mobile, recently acquired by the Dixons Group PLC. He originally worked for NTL so has a good comms background. (Lee joined Wearside last year from Ward Air).

Also joining the fray is **Paul Clelland**. Paul is no sprog either, joining us from Sungold Auto Electrics, and his vast experience as a vehicle sparky makes him ideal to take on the increase in mobile phone and radio car kit installation work with our current installer, **Paul Doble**.

### Current Ownership and snips of Mobile Operators

T-Mobile (was 121) ...Deutch Telekom...Virgin uses their network  
O<sub>2</sub> (was BTCellnet)...MMO<sub>2</sub> (Br) ..sorry for text overcharging errors  
Vodafone...Vodafone (Br)....have ordered a million camera phones  
Orange...France Telecom...300 call centre jobs to go, incl Darlington

### Current Mobile Phone Offers

Double free minutes for 3 months on most O<sub>2</sub> tariffs  
Over £100 off list price of XDA (Personal Digital Assistant)  
Free Nokia 8310 on Vodafone Company Caller Tariff

### New Two-Way Radios

Motorola Talkabout T5522 (PMR446), including rechargeable batteries & charger. 8 channels, 38 codes. Great for holidays. Up to 2 miles range in ideal conditions —  
**£170 a pair, no licence fee or airtime/call charges.**

*All available from Wearside Communications*

# THE O<sub>2</sub> XDA



The XDA

The XDA is a PDA—a mobile phone, organiser and pocket pc all in one. Mobile data is one of the real growth areas in communications and the XDA is the latest offering. Unlike WAP, the XDA, using GPRS technology, which gives 3 times the data speeds of standard mobile phones, can surf all websites in full colour. Software includes Pocket Excel and Word and Media Player 8.

Up to £200 off RRP until 30th Sept - Discount price — £250 on Business first.

The XDA has the following features :

Internet access  
Send / Receive emails  
Listen to music  
Full colour screen  
Microsoft Windows  
Full GPRS capability

Mobile phone, leather case, desktop charger  
Diary / Calendar / Games  
Download from computer  
Stylus and touch sensitive screen  
32Mb RAM  
201 grammes, 18 x 73 x 129mm

*For more information or a demonstration, call Lee or Martin*



## Which Mobile Communications System suits your business?

Whilst mobile phones is the most marketed mobile communications product, and many businesses find their mobiles indispensable, it does not suit every company's needs and is not always the most efficient or cost effective solution. Here are some alternatives:

*Two way radios give immediate contact with no call costs. Ideal to control fleets or between workers on a site. Calls can be to an individual person or to a group, say all engineers, or to all users. They can be private calls or open calls heard by all. All can be operated handsfree. Here are some two way radio systems (Ranges stated are very approximate and depend on terrain, height of aerial etc):*

**PMR446**—A low cost radio that operates over a short range (up to about 2 miles in ideal conditions, more typically ½ - 1 mile). Ideal for on-site man-to-man contact. No licence fee, small and light.

**PMR**- Higher power, greater range (approx 1-15 miles), and a little more pricey. They require a licence and the radios are generally more robust and have more options. Using a base station, e.g. at the office, will increase the range. For larger fleets requiring greater range it may be cost effective to site the base station on, say, a BBC transmitter site. Multiple sites are possible, improving range.

**CBS** This system uses the said BBC or other radio site and the system, and the costs, are shared by several users (who cannot hear each other). The operator (e.g. Wearside Comms) pays the licence fee and all the user pays is a fixed sum per mobile per month.

**Trunked CBS** - The disadvantage of a simple CBS system is that only one user company can be on air at any one time. Calls are limited to, say, 3 minutes to reduce any waiting time (an average radio call is 25s). Trunked systems use many channels to give instant access. Multiple sites also give wider range (say York to Alnwick) and there are more features than most other systems. Telephone calls are often possible.

**PAMR** - Some trunked networks have national coverage and these can be analogue or digital. (In digital systems, speech is transmitted in a series of pulses, whereas analogue transmissions are sent as a copy of the speech waveform). Dolphin (risen from the ashes as mentioned last month) are a digital PAMR network and they sell through dealers such as Wearside.

**Satellite Phones**—Some phones can use satellites to make calls, giving real global coverage. Call costs have dropped considerably over recent years but are still higher than cellular calls, although some phones can revert to terrestrial GSM stations when in coverage, benefiting from normal costs.

### The Highway Code

Clause 127 says —'You MUST exercise proper control of your vehicle at all times. Never use a hand held mobile phone or microphone when driving. Using hands free equipment is also likely to distract your attention from the road. It is far safer not to use any telephone while you are driving—find a safe place to stop first.'

*Thanks to everyone who returned our questionnaire. We got loads back and are still sifting. Two things stand out so far. Our car kit installers got excellent marks and my thanks (and £50) have been passed on to them. You thought our repair turnaround was a little slow and the service manager and I are addressing that. You will see results within the month.*

Call us for Website Design or Hosting—Grants are available

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