

WIRELESS TECHNOLOGIES

A big push for the new walkie-talkies

Image issues and the lack of interoperability have deterred the wider take-up of PTT, but this is changing, writes Geoffrey Nairn

Fritz Strobl, Austria's Olympic gold medalist skier, has access to some of the most advanced technologies to improve his skiing. But – whisper this quietly – he keeps in touch with his team using a walkie-talkie.

Push-to-talk (PTT), as the walkie-talkie technology in Strobl's phone is known, has a big image problem. More often associated with plumbers or delivery drivers than downhill skiers, the mobile industry wants to shake off the down-market image and promote PTT to a much wider market.

"Today, PTT is a niche product but it has considerable potential and the future is likely to see many new ways of using PTT," says Hannes Ametsreiter, chief marketing officer of mobilkom austria, the largest mobile operator in Austria. Mobilkom is running PTT trials with 400 users on its GPRS network. It hopes to demonstrate that PTT appeals not just to downhill skiers but to two core segments of the mainstream mobile market: corporate users and young people.

The corporate market could be difficult to crack. White-collar workers bristle at the technology's blue-collar image, but a bigger problem seems to be a lack of interest. In a 2003 survey of corporate decision-makers,

conducted by US research company Telephia, only 7 per cent had plans to launch a PTT service in the next 18 months.

But the past year saw PTT acquire new momentum as more operators started PTT trials and handset manufacturers added a PTT button to more models in their ranges.

Operators are keen to offer PTT because it provides one of the few proved ways to boost average revenues per user (Arpu).

"If voice makes up 90 per cent of your revenues, forget about data services – you need to boost voice revenues," says Bruce Lawler, vice-president of business development at Kodiak Networks, a small US vendor of PTT technology.

Nextel, the US operator and PTT pioneer, has done just that. It launched the first PTT service in the US in 1996 and is the envy of the industry because its Arpu figures are consistently above those of its rivals.

Cynics might wonder why people pay more to use their cellphone as a walkie-talkie rather than as a conventional phone. But Nextel's users are reluctant to go back to using a traditional cellular service – the operator has lower levels of churn than its rivals.

"PTT is nothing like regular communications and for

many users it's an entirely new experience," says Pascal Coutier, chief technology officer at Logan Orviss, a telcoms consultancy.

The difference between PTT and a conventional call is that the connection is made almost immediately the PTT button is pressed. The recipient can hear what is said via their phone's loudspeaker without having to pick up the phone. A group-talk function, similar to the "buddy list" of instant messaging (IM), allows a group of people to listen in on the call.

Like a walkie-talkie, PTT uses "half duplex" communications. This means that when someone is speaking, no-one can reply until the caller releases the button. The phone then chirps, meaning it is someone else's turn to speak. Technically it is a very efficient way of handling simple dialogues, such as "Has anyone seen my report?"

In addition, PTT systems have borrowed from IM the concept of "presence" – knowing whether a person is online or not. Chris Goswami, product manager at Openwave, a US vendor of mobile software, says this has potential in a corporate context and can be used to transmit information or trigger business processes.

Kodiak's technology goes

beyond presence and monitors "availability" – whether the person is available to accept a PTT call. Delivery drivers, for example, may switch their "availability" off while driving, but keep the phone on to listen to what others are saying.

The big problem with PTT today is that the technologies are proprietary and PTT users of one network cannot communicate with those on rival networks.

The Open Mobile Alliance is working on a specification to support PTT interoperability, but according to Mr Goswami, handsets and services based on the OMA specification will not appear until the end of 2005. Interoperability remains a big hurdle to popularising PTT, particularly with consumers and small businesses. It is less of an issue for enterprises as they can standardise on a single PTT network. Until these issues are addressed, the true potential of PTT will remain elusive.

