Irish university researchers to enhance global mobile phone systems

A high-tech Irish university research project has been granted €400,000 in Enterprise Ireland funding to bring advanced new mobile telephone systems to the global market.

Called Metakall, the new project is the brainchild of top researchers at Ireland’s Centre for Telecommunications Value Chain Research (CTVR), headquartered in Trinity College Dublin.

Metakall is a new software invention, which will provide telephone users with low cost calls using public wireless hotspots and the Internet as the network infrastructure. The systems are being developed by CTVR in Dublin.

CTVR foresees a fully fledged commercial spin-off arising from its research and has filed patent applications to protect the intellectual property involved. The project will now be progressed into a full working implementation when CTVR starts field tests of the new systems.

Possibly the most innovative feature of the new technology will be the ability of consumers to roam and pay-as-you-go at low cost rates, using a laptop or Wi-Fi phone wherever the wireless Internet is available.

CTVR Director, Professor Donal O’Mahony explained. “Imagine the possibility of going anywhere in the world and using your wireless phone or laptop to make calls through the Internet for as little as 5 cent a minute, with no other costs.”

“Right now you can make Internet based phone calls, but you will also have to pay a monthly registration charge of over €20 to an Internet Service Provider or buy a scratch card in each location for about €10. Only then can you use service services like Skype or Vonage for example. We took the view that those kind of charges don’t make sense for just a phone call, so we’ve developed a system which users are going to like a lot,” said O’Mahony.

“Metakall uses technology to pay hotspot operators small amounts of cash in real-time. Our software will sit in your laptop or wi-fi phone automatically logging you on to the nearest hotspot and paying only as you make your calls. A real-time meter will show how much your call is costing as you talk. The rates will vary, but on average what we are looking at is about five cent per minute.”

Metakall’s software will be compatible with Microsoft Windows XP and Vista, i.e. virtually all laptops, as well as Microsoft Windows Mobile - including HP, iPaq and Palm Treo handheld PCs. The CTVR research team is also actively porting its software to the most popular platforms for a number of wi-fi telephony handsets including Linksys, Netgear and others.

“There is growing excitement about the new platform created,” said O’Mahony.