The Wireless World Initiative (WWI) has developed prototype user-centred systems that will potentially enable millions of people to make the most of third-generation (3G) and beyond mobile technology to work, relax and play any time, anywhere. ICT Results reports back from WWI’s crowning event.

It is Monday morning in the not-too-distant future and two neighbours, Bob the builder and Bob the businessman, are getting ready for work. The builder has to drive to a job in a nearby town and the businessman needs to take the train to the office. They switch on their televisions and request information on road and rail conditions.

Outside their front doors, the two Bobs wish each other a good morning and head their separate ways. On the train, the businessman watches the financial news on his palm pilot, while the builder tunes in his phone to
his favourite digital radio channel and relaxes in the morning traffic to some classical music.

Meanwhile, the businessman phones his secretary and tells him through his earpiece that he forgot his PowerPoint presentation and speech. Bob the businessman’s palm pilot bleeps as he enters the state-of-the-art conference centre where he is to give a speech and presentation. It informs him that he has entered a high-data rate zone and asks him whether he would like to switch to ‘superbroadband’.

He sits in the conference building’s lounge area and notices a message from his secretary in his inbox. He begins to download the documents he requested and surfs the web to do some last-minute research.

In the evening, both Bobs decide to go out. The builder checks the opera programme on his phone, while the businessman checks the cinema schedule and they buy their tickets online. Their phones’ e-signatures authenticate who they are. As they enter the opera house and cinema, their phones automatically switch to mute.

**Wonders of a wireless world**

The EU-backed Wireless World Initiative (WWI) has developed the prototype user-centred systems that have brought these future Bobs a lot closer to the present. The integrated architecture the initiative’s five projects – MobiLife, SPICE, WINNER, Ambient Networks, E2R (see individual boxes) – have developed will potentially enable millions of people to make the most of third-generation and beyond mobile technology to work, relax and play any time, anywhere. And, to top it all off, their experience will not just be wireless but also seamless.

Funded under the previous Sixth Framework Programme (FP6, 2002-2006), the WWI has worked over the past few years to develop
ambient networks which will enable the seamless transition and interaction between services across a range of currently distinct and disjointed technology domains.

“In the future, Bob and millions like him will be able to benefit from and enjoy lots of wireless services,” describes France Telecom’s Marion Duprez, who heads WWI’s Cross-issue Validation Team. “The technology underpinning all this is very complex and sophisticated, but this does not matter to Bob.”

**Threads in an intricate web**

Although they do not concern Bob, these platforms and how they relate to one another matter greatly to WWI. Each of the initiative’s four projects focused on a particular technical challenge that needs to be overcome in order to enable mobile technology to come of age. At the same time, the projects worked closely together to ensure that their platforms and systems fit seamlessly together. This is what the WWI calls ‘transparent seamless mobility through distributed architecture’.

“Our team was in charge of creating the scenarios to show that the four projects could work together to provide integrated services,” explains Duprez in the demonstration area of WWI’s final conference, which took place in Brussels on 13 November 2007. “Creating this end-to-end system was a real challenge. It required a lot of brainstorming, coordination and experimentation.”

But, as the Brussels demonstrations amply illustrated, they pulled it off. “It has been very valuable to have this co-operation between telecom operators, manufacturers and universities. Commission support was also invaluable in ensuring that the projects were well-lead and coordinated,” noted Duprez.
Both industry and operators are already showing signs of interest. “At France Telecom, we have invested a lot of effort into these systems as part of our commitment to offer new services to our customers,” Duprez stressed.

Source: ICT Results