Irish spectrum lures Japan

Ireland is offering Japanese companies a chance to access its radio spectrum in the hopes of encouraging investment and jobs, writes Katrin Lillington.

Japanese telecommunications operator, DoCoMo, has profited last year by 63 billion. The scale of the telecommunications services and devices in Japan is massive, but they need to expand out of their markets, Byrne says.

"A lot of those companies have to look abroad," Byrne says.

Europe, another sophisticated mobile nation, is an especially attractive market for the Japanese, as well as for the South Koreans and other Asian mobile-focused countries, he says.

The issue is persuading those industries to come to Ireland, where we have what amounts to "a spectrum playground," says Conallog spectrum development manager, Ronan Kennedy.

If Japanese companies and universities decide to set up projects here, many brands could be realised. The Japanese government already has developed what it calls "special ubiquitous zones" in regions of Japan where infrastructure is put in to support research and innovation.

The possibility of developing sister sites in Ireland for joint innovation was discussed in Japan, says Byrne. His company's license sales have come as a direct result of the Japanese interest.

"I'm confident several projects will be in the offing by the end of the year," Byrne says.

Many of the contacts are "a long game", with Japanese business players traditionally moving extremely cautiously, Byrne says. But those should develop over time.

Along with the potential for further research in spectrum use, other possible research and development projects could be in life and medical sciences, mobile communications, in undertaking development of commercial products, he says.

"Any licence agreement that requires a wireless network, we’re here,” concludes Byrne.

Big waves: what they do

Radio spectrum is the range of radio waves and the frequencies that can be used for telecommunications by various devices over set channels. It is a channel defined by a group of radio wavelengths. Frequencies are measured in megahertz, units describing how many millions of times the radio waves oscillate per second. Lower frequencies are assigned to kilohertz, while higher frequencies are assigned to gigahertz.

Optimistically thought of in terms of radio or television receivers, radio spectrum is utilized for anything from mobile phone networks, garage door openers, traffic control and medical devices to iPods, stereo systems. It is the medium on which commercial radio, television and mobile telephony networks are based.

With every new wireless device and service demanding access, spectrum is becoming an important national resource for countries. Ireland is a relatively small nation, with a small population density, where there are few problems with frequency overuse and interference. Contract that with Germany, whose borders touch 13 other nations. That makes Ireland’s spectrum attractive for test and demonstration projects.

As the regulator for Ireland’s spectrum, ComReg has developed a programme around networking test and trial spectrum licences to other countries and corporations.

Every country in Europe is trying to maximise their spectrum market, but the others don’t have our advantages