

# CTVR spearheads telecoms research

ICT has been identified as one of the principal pillars of our future economy, which is why Science Foundation Ireland (SFI) established the Centre for Telecommunications Value-Chain Research (CTVR) in 2004. CTVR is the Centre for Science, Engineering and Technology (CSET) dealing with the telecommunications sector. It brings together nine academic partners with Bell Labs as a principal industry partner.

Because of the broad scope of telecommunications research, CTVR spreads its resources across a number of key topics, which are examined by smaller teams of researchers in order to find academic solutions and commercially interesting ideas which could result in either significant academic papers or intellectual property, and eventually products. This could take the form of licensed technologies or even campus spin-outs.

"We have seen lots of good early signs, and some of these are already on their way out the door," said Donal O'Mahony, director of CTVR. "It is a long pipeline, but we have begun to produce some interesting research ideas. Our main partner, Bell Labs, has a tradition of doing research and finding ways of infusing this research into its product lines."

All of the researchers at CTVR, whether from an academic or an industry background, are operating at the leading edge of their field. These researchers have been drawn from Ireland and from overseas, because there is a realisation that attracting the best researchers from around the world will add to the quality of research taking place at the centre and help the Irish cohort to grow in expertise.



Donal O'Mahony, director of CTVR

"CSETs are a critical component in the national economy, in terms of producing skilled people and ideas, and bridging industry and academia," said O'Mahony. "Our first role is about finding what topics to do our research into, choosing the ones that will have the greatest impact."

Current topics for research include emerging networks, which focuses on the form of future networks in terms of protocols, control, management, mobility handling, routing and other architectural issues.

Also of interest to CTVR

is the area of photonics, which focuses on key issues in the realisation of an all-optical network, including transparency and intelligence, and RF, which is aimed at realising the next generation of fully reconfigurable radio transceivers and associated intelligent antenna systems.

"We are starting to see very good links with smaller Irish companies, as well as the emergence of potential spin-out companies," said O'Mahony. "But, in addition to this, we are also delivering real value to our multinational partners."