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QuintessenceLabs announces breakthrough 2nd generation quantum cryptography technology providing ultra-secure, untappable communications

QuintessenceLabs, the leader in quantum communications technology for networking, communications, national security and defence, announces the world's most advanced commercial quantum communications technology incorporating telecom "bright" lasers.

Canberra, March 3, 2009: QuintessenceLabs, the leaders in ultrasecure, untappable quantum communications technology, today announced that, rapidly following its successful \$2 million seed financing, including the award of a \$1 million Commonwealth government grant, it has delivered the world's most advanced secure communications capability, based on 2nd generation quantum cryptography technology.

Use of quantum phenomena for achieving absolutely secure communication, known as quantum key distribution (QKD), was first suggested in 1984 by Bennett & Brassard at IBM. In its first implementation, a random sequence of secret key bits is encoded onto single particles of light and transmitted one bit at a time. Although a revolution in security, this first generation of QKD systems offers low rates of secure key generation, and requires expensive equipment.

QuintessenceLabs' 2nd generation QKD technology integrates seamlessly with preexisting communications infrastructure providing ultra-secure, one-time pad encryption in real-time. Products incorporating QuintessenceLabs' bright laser technology can achieve high speed, untappable, ultra-secure communications at a fraction of the cost of competing technologies.

"We are excited to achieve this breakthrough in secure communications", said Vikram Sharma, Chief Executive of QuintessenceLabs, "The calibre of our engineering and scientific teams is amongst the most highly regarded in the world, and we are delivering significant advancements in quantum communications with our continuous variable bright laser technology".

Quantum communications is a key technology that will revolutionise networking in the coming years. The rapidly advancing quantum field is spawning a range of strategic technologies including quantum computing, quantum sensing and quantum optics which are set to fundamentally transform the world of information technology.

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About QuintessenceLabs

QuintessenceLabs is a leader in quantum communications technology for networking, communications, national security and defence. Our 2nd generation, high performance communications technology makes use of our breakthrough research in continuous variable, bright laser quantum cryptography. Unlike first generation systems, our technology incorporates off-the-shelf components to deliver lower cost, higher performance, highly robust and scalable quantum security products facilitating ultrasecure, untappable *everlasting* security.

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