Rats, Diggers and Fibre Optic Cables! (How to Plan Reliable Next Generation Telecommunication Networks)

Presented by: Richard Harris (Massey University)

Time: 6:00 – 7:00pm

Date: Thursday 22nd March 2007

Location: Victoria University, Lecture Theatre GBLT2 located

behind the Government Buildings which house the Law School (opposite the cenotaph, Lampton Quay),

Wellington CBD*

Parking: There is usually some parking behind the old

Government Buildings between them and the

Telecom exchange. Otherwise a car park behind the

Ferryman's pub opposite the railway station.

Abstract

Eftpos and online services crashed, mobile phone services were overloaded and trading on the NZX was halted when Telecom's main communication network was broken in two places in 2005, sparking news of this event around the world. More than 100,000 people and businesses were affected by the outage.

Situations like the severing of a fibre-optical cable at Taranaki or the gnawing of the eastern pipeline cable by a rat are typical problems experienced by telecommunications companies around the globe as they strive to maintain fully reliable services to their customers. To experience two such failures almost simultaneously in such a way as to cause a significant network outage is much rarer, but not an impossible event.

Now that we are so totally reliant upon super-networks that carry every conceivable type of communications traffic, how do we ensure that these networks are as reliable as possible? The talk will consider some of the challenges and approaches being taken to try and ensure that our future networks and services are resilient to failure.



Discussions can continue at the nearby "Backbenchers" after the presentation for those wishing to avail themselves of this opportunity.

*Location map: http://www.vuw.ac.nz/home/about_victoria/gfx/pipitea_map.gif