



**Senator the Hon Stephen Conroy
Minister for Broadband, Communications and the
Digital Economy**

**Deputy Leader of the Government
in the Senate**

Address to NICTA Techfest

**Canberra
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15 mins

Thank you [MC]

It is a pleasure to be here today for this showcase of NICTA's research.

NICTA has already had some remarkable success over the last five years, and this showcase tells us that there is a lot more success ahead.

In the ICT context, 'success' can be hard to measure.

These are often *enabling* technologies and do not always show up in economic statistics.

But we can see the benefits of ICT all around us, in our increasingly digital world.

Last week I was in Thailand for the meeting of APEC telecommunications ministers.

I wanted to give an Australian example of how ICT was solving problems, creating efficiencies, and benefitting ordinary Australians.

So I told the ministers about NICTA's Smart Roads and Traffic—or STaR—project.

For those of you who don't already know, this project uses advanced technology to provide an integrated set of tools to better manage and direct traffic flows.

StaR will lead to more efficient operation of roads, more reliable travel times and fuel savings for drivers and more reliable—and therefore more attractive—public transport.

Environmental impact will be further reduced through lower emissions.

There will also be good health outcomes through fewer accidents, less pollution, less stress, and more efficient emergency services.

This is just one example of how ICT is leading to social and economic benefits and linking every sector into the digital economy.

This morning we can see many more examples like this.

It is not overstating the case at all to say that fundamental advances in ICT lead to much greater advances across all sectors of the Australian economy.

The point is that while it is important to be a leading *user* of ICT, this in itself is not enough.

Is Australia to be just a fast adopter of other nations technologies or are we to be a creator and exporter of new technologies?

And this is where NICTA comes in.

With an Australian Government investment of more than \$385 million over 10 years, NICTA is addressing Australia's strategic ICT innovation needs and developing our broader ICT capabilities.

For the Government, this is a major long-term investment in Australian ICT research and training, which involves the co-operation of four state and territory governments and seven universities.

And this investment is certainly paying off.

NICTA has established key ICT research infrastructure at its five laboratories in Sydney, Canberra, Melbourne and Brisbane which are engaged in 35 research projects.

It has become a key national research facility with over 220 research related staff and 290 PhD students.

Through its PhD program, NICTA is helping to build Australia's advanced ICT skills base and is developing Australia's future ICT entrepreneurs through its focus on both research and commercialisation skills.

NICTA has established strong links with the research community, including major overseas research institutions, and is working with SMEs and multinationals to develop Australia's ICT sector.

In April, for example, NICTA announced its collaboration with Locatrix Communications and the Queensland Department of Emergency Services.

This activity is developing tools for emergency service agencies so they can get fast, accurate information about unfolding situations.

This falls under NICTA's Smart Applications for Emergencies project, which is working towards keeping Australia safe and assist in emergencies, an area of major national importance.

Commercialisation activity has increased as NICTA builds on its already impressive patent portfolio and strong commercialisation infrastructure.

Over the last 18 months, NICTA has spun out four companies to commercialise key aspects of its research.

Products and services are being developed in areas such as wireless telecommunications solutions, embedded operating systems for mobile phone chipsets, digital-audio networking systems and internet technologies.

In March, NICTA announced that Monitoring Division, its latest spin-out company, is commercialising technology that can improve the speed of optical networks carrying internet traffic.

This technology has benefits that will enhance the delivery of broadband, and is of high importance in terms of linking in with the Government's broadband agenda.

In fact, NICTA is a key plank of the Government's ICT and digital economy policy agenda.

Education, infrastructure, innovation and effective regulation are all components of how we use technology to enhance and create better ways of working, learning and living.

Digital Education Revolution

NICTA relies on talented researchers and PhD students as the lifeblood of innovation.

There is an obvious link between education and the availability of talented, innovative people who want to dedicate themselves to this very important work.

And, increasingly, ICT is a vital part of every child's education.

The Government is ensuring Australian students are prepared for further education, training, jobs of the future and to live and work in a digital world.

We are doing this by providing the education sector with \$1 billion over four years to provide sustainable and meaningful change to teaching and learning in Australian schools.

This will include grants of up to \$1 million for schools to assist them in providing new or upgraded ICT for secondary students.

There is also a contribution of up to \$100 million for the provision of high-speed fibre broadband connections to schools.

These initiatives will be accompanied by the development of online curriculum content and conferencing facilities for specialist subjects such as languages.

Teachers will also have access to training in the use of ICT that enables them to enrich student learning.

And to take advantage of the opportunities for collaboration that new technology allows, web portals will be developed so parents can participate in their child's education.

As you know, the Rudd Government has made broadband a first-order priority.

Getting fibre closer to end-users is imperative to that goal, as is ensuring that higher speed connectivity is available to all Australians at affordable prices.

The Government is moving quickly, yet systematically, to fulfill its commitment to provide up to \$4.7 billion and to consider necessary regulatory changes to facilitate the roll-out of a new open access, fibre broadband network.

When completed, this high-speed network will provide 98 per cent of Australian homes and businesses with access to *minimum* speeds of 12 Mbps.

The National Broadband Network is foundation infrastructure and is intended to support future upgrades that will enable even better services for consumers and businesses.

People are demanding more capacity but importantly, many of the truly revolutionary applications of the future will demand it too.

These applications will be integral to further development in areas such as health and education, and therefore to Australia's future prosperity.

Techfest 08 is a great opportunity to see some of the applications of the future.

The showcase contains over 20 of NICTA's leading research developments.

It gives industry, users and research scientists a chance to see first-hand what NICTA is doing to position Australia as a global ICT player.

In doing so, it also shows where taxpayer dollars are going and that this is certainly money well spent.

Today, for example, you can see a project which will increase the storage capacity of mobile phone devices.

There is a low cost wireless operated sensor for urban and rural water management – a critical issue for governments throughout Australia.

And there is also the STaR project, which I mentioned earlier, to help manage traffic flows and reduce congestion.

It is very easy to see the commercial and social value of these projects and the other 17 on display today.

In the fast moving world of technology, it can be difficult to anticipate what applications will arise next and how they will be used.

Techfest gives us a glimpse of the future.

But, importantly, this is not a far distant future.

Many of the projects on display today are close to commercialisation, and I am sure events like this will help stimulate interest from investors and from the community in general.

NICTA is thinking about the more distant future as well.

I was interested to hear Lab Manager, Doctor Terry Percival talking about NICTA's 2020 vision through a "second life" presentation¹.

Dr Percival outlined a number of scenarios of a future where ICT was addressing some of the major problems we face in the world today.

In the area of healthcare for example, Dr Percival spoke of a pre-emptive system where wellness was controlled rather than illness occurring.

¹ <http://www.nicta.com.au/about>

Doctors would call patients *before* they got sick, based on 30 second daily health-checks in the home which would send information to health care professionals.

He also envisioned a much cleaner world where ICT had drastically reduced energy consumption, improved public transport, and removed the need for work-related travel.

These possibilities really highlight that the work done in ICT research and development is not just important, it is vital.

I would like to thank NICTA for hosting this showcase, and for the very important work they are doing to ensure Australia is at the cutting edge of technology.

I look forward to the hearing more about the success of NICTA's research projects in the coming months and years.

Thank you.