

## Speech by ACIF CEO Anne Hurley for Australian Telecoms Summit 2006



According to the nineteenth century British politician Benjamin Disraeli, *"the most dangerous strategy is to jump a chasm in two leaps"*.

In many ways our industry is about to jump a chasm because we are moving from an established, known environment into a new and largely unknown environment.

Certainly we can make some assumptions and we have a fairly good idea about the direction we are heading.

However there is still an enormous number of unanswered questions about the strategies we need to employ to reach our objective.

When you are dealing with vital services like telecommunications, you have to be absolutely confident that when you embark on that strategy, it will see you safely across the chasm.

I know some commentators have voiced the opinion that there has been too much talk and not enough action in developing our NGN transition strategy.

My view is that successful outcomes are entirely dependent on the planning.

If we need to spend extra time identifying the issues, discussing the possible ramifications and plotting the most effective course, it is far better than stumbling half way through the implementation phase.

In assessing the options for developing our NGN transition strategy, one of the first questions to be addressed is who should do it?

Should we leave it to the government and the regulators to decide how to proceed?

Should the industry take full responsibility?

Or should it be a collaborative exercise?

I think it is instructive to look at the approach being adopted with VoIP, which is a precursor to NGN.

The adoption of VoIP services has raised a number of the issues we will need to confront with fully converged IP networks.

So far I believe we are handling them in a very systematic, cooperative way.

There has been extensive consultation between government and the industry, resulting in broad agreement about who is responsible for resolving the various outstanding issues concerning VoIP.

Minister Coonan has given the industry the freedom to work through the various mechanisms of ACIF to agree on many of the technical and operational aspects, leaving DCITA, ACMA and the ACCC to concentrate on the outstanding competitive and regulatory matters.

In doing so, we have been able to solve a lot of the tricky problems by consensus and information sharing without having to resort to heavy-handed prescriptive or proscriptive regulation.

I have been impressed by the level of maturity and willingness to co-operate that has been displayed in this process and I believe it offers an excellent blueprint for developing the broader NGN transition strategy.

In that context there is another quotation that comes to mind, this time from the eighteenth century English writer Samuel Johnson:

*"The prospect of hanging concentrates the mind wonderfully".*

I'm not suggesting that the major players in our industry are just cooperating because they fear the alternative, but they certainly realize the consequences of not working on the NGN transition together.

So, for those of you who are skeptical about why industry self-determination works in a highly competitive market, let me remind you that it isn't just altruism.

It's because of practicalities and because self-interest and the common interest converge.

Of course it would be naive to suggest there is total agreement and harmony within the industry on all of the crucial NGN issues.

You only have to read the newspapers every day to see the differences of opinion about some of the commercial access and competitive issues to appreciate that fact.

Nevertheless there is a lot of difference between commercial rivalry and the sort of constructive collaboration that we witness around the table at ACIF every day.

It is that latter element which will be so valuable in helping us to develop a coherent NGN transition strategy.

Not only is it desirable that the strategy be developed as a cooperative exercise between government and the industry, but I believe it is the only feasible option.

Neither government, nor the industry could do it alone.

A great deal of the technical and operational knowledge is only contained within the industry itself, while the government is best placed to consult the many other stakeholders outside our industry.

They include other industry sectors as well as the various layers of government, administration, law enforcement and other agencies who have a keen interest in providing input to the process.

As to how the strategy should be developed, ACIF has already made some significant progress in that regard.

Internally, we have formed several working groups with broad representation to recommend the most effective approach and to identify areas that require further input.

One such area is NGN access technologies – including fibre, wireless, mobile and others such as BPL.

Therefore we have launched a series of what we call “Future Forums” designed to achieve consensus about the access issues that will need to be resolved in developing the NGN transition framework.

Those issues include operational, technical, regulatory, commercial and potentially other areas as well.

We are determined to keep our Future Forums keenly focused on achieving solid outcomes.

We want to encourage thorough analysis of the issues and then capture the output in a series of reports that contain practical recommendations.

Those recommendations will suggest how to develop the strategic framework for the NGN transition and the substance of what the industry considers should go into the planning process.

We are not looking for answers at this stage because we don't want to pre-judge issues before they have been thoroughly examined.

However we certainly need to get clarity about the topics which industry collaboration must and can take forward.

While identifying those issues, we are developing a parallel list of policy and regulatory issues that other stakeholders – such as DCITA, the ACCC and ACMA – can work on with us.

When I opened the first of these forums last Tuesday, I stressed that we would not be diverted into discussion of the individual dialogues that are currently being played out in other forums such as the ACCC or access disputes between specific players.

We are looking beyond those matters to the issues that flow from the assumption that Australia's NGN infrastructure will be made up of a variety of backbone networks and access technologies.

Unfortunately some of the press reports focused on a couple of differences of opinion about the various fibre network schemes that are currently being proposed.

However an objective assessment of the forum presentations and discussions demonstrates that the industry has more in common than divides it.

Perspectives which were largely shared include:

- industry has a responsibility for bringing high bandwidth to all Australians, although a leap of faith is required because of uncertainty around the services and applications and the likely return on investment;
- there may be more than one model which could deliver the infrastructure, but there is still a question about the balance between facilities-based competition and services-based competition;
- the over-riding objective of the NGN rollout is national competition and economic benefits for Australia.

Common themes which emerged are as follows:

- because Australia doesn't yet have an NGN in place, progress is difficult without knowledge of what model (or models) of network will ultimately be deployed;
- there is not a 100-year frame of reference for the network, as there is for the PSTN, but defining this frame of reference provides an opportunity for industry collaboration;
- a feature of an NGN will be layering of providers - infrastructure, services, applications - and distancing of relationships (ie the applications provider may not be the same as the infrastructure provider);
- the end-game for Access Seekers will be closer access to their own customers and control over the service to those customers;
- there are architecture issues for industry to consider in fibre-based networks, particularly around the architecture of the node and the impact that has on the ability to unbundle an FTTN network;
- there is need to have further clarity and knowledge around the services and applications likely to be demanded, as well as the return on investment in supplying the services and applications;
- Cost will still be a driver and the responses of other industries to potential applications needs to be understood;
- there are a range of operational, technical and commercial issues which industry can collaboratively work on;
- there are also matters which may need regulatory intervention, but the role for self-regulation or self-determination is supported by the Government and the ACCC.

So the forum validated ACIF's belief about the overall approach we should be taking to the development of the NGN framework.

At the same time, it confirmed the complexity of the task that confronts us and the folly of moving forward too quickly without adequate planning.

Various speakers and audience members at the forum raised a number of issues that will need to be resolved in the NGN transition.

They include:

- Where can an alternative service provider plug in to the network and get access to the subscriber?
- Is it technically and commercially feasible to unbundle services at the node in an FTTN or FTTH network?
- How do we provision multi-provider networks and services?
- How do we manage and measure quality of service?
- Who does the end-user call if there is a problem with a multi-provider service or network?
- Will services and applications interoperate between different networks?

- What services will be possible and where will the content come from?
- What scope will there be for end-users to tailor individual services to suit their specific requirements?
- What access requirements might be set by government for network infrastructure built with public funding?
- How long can old and new networks co-exist?
- What is the likely timeframe for the NGN rollout and can Australia afford to wait and see what the rest of the world is doing?

ACIF has already begun work on examining a number of those questions, while others are under investigation by DCITA and the ACCC.

For instance, quite a few of the issues identified at the forum relate to interconnection and quality of service.

Late last year ACIF conducted its second VoIP Forum and as a result of the feedback from that event we commissioned an Industry Discussion Paper on Quality of Service for VoIP Interconnectivity.

We released the discussion paper for public comment in March and disseminated it as widely as possible to seek further input.

To address the question about the need to ensure our NGN framework is aligned with the rest of the world, we also sent the discussion paper overseas to seek international feedback.

However it was interesting to note how the discussion paper reported that Australia appeared to be the first country in the world where these issues are being approached from a whole-of-industry perspective.

Apart from the satisfaction of knowing that we are leading the world in this area, it is alarming to see that this critical issue is being given so little attention elsewhere.

Nevertheless we did receive some very constructive feedback on the discussion paper, including responses from Hong Kong and the UK.

Those responses are now being considered by a new ACIF IP Interconnection and QoS Subgroup, chaired by Dr Paul Brooks, founder of the Layer 10 consultancy.

As well as analyzing the responses to the discussion paper, that subgroup has a much broader and ongoing role.

Its charter is:

*To identify and evaluate aspects of IP communications that relate to the interconnection of multiple provider networks or services, including QoS aspects in particular, and report with recommendations on aspects that may require industry coordination.*

The objective is to identify, evaluate and recommend solutions to address the issues before the volume and pressure of inter-provider calls become significant.

In doing so, this working group will help ensure that appropriate information and coordination is available to the industry.

As a result, it is hoped to prevent the concerns becoming major service-affecting barriers for subscribers or requiring large investment to retro-fit networks or processes at a later time.

Participation is open to interested parties representing key stakeholder groups or with relevant expertise to contribute.

The relevant stakeholder groups include:

- IP and telephony network operators;
- VoIP service providers;
- Business end-users;
- Residential end-users;
- Vendors and manufacturers of equipment used to interconnect infrastructure;
- Government agencies and regulators.

The subgroup will provide monthly updates to ACIF and issue interim reports of findings in December and June of each year.

As I mentioned earlier, Australia appears to be breaking new ground in the area of VoIP interconnect and QoS but there are undoubtedly lessons we can learn from our overseas counterparts in other areas.

The NGN world does not respect many of the borders we have been able to apply to our industry in the past.

So our NGN planning will need to include an international focus to make sure Australia is aligned with the rest of the world.

Fortunately there appears to be a lot of similarity between the NGN networks that are planned to be rolled out in Australia and overseas.

At last week's forum we were fortunate in having Michael Cosgrave from the ACCC as one of our speakers.

He presented a number of slides showing the NGN architecture the major telcos are planning to rollout.

For someone with my limited technical understanding, they looked like a multi-coloured collection of blobs, boxes, clouds and interconnecting lines.

However he assured us that the various NGN platforms were very similar and they posed essentially the same sorts of challenges for all of the countries involved.

So obviously there is potential for us to share a considerable amount of information and adopt relevant aspects of each other's NGN transition frameworks.

In that regard, the European Commission has just begun a thorough review of what it calls its "regulatory framework for electronic communications".

The EU framework is designed to be "future proof and to take account of the convergence of digital technologies".

The review will involve an examination of the framework's principles and implementation, especially to remove any bottlenecks that are delaying the provision of faster, more innovative and competitive services.

It is being conducted both in-house and with input from expert studies as well as an extensive public consultation process.

The review is scheduled to conclude by the end of this year.

Britain is also taking its NGN transition seriously and in June last year the regulator, Ofcom, published a number of policy principles and processes to support the development of NGNs.

As a result of that exercise, a new industry body, NGN UK, is currently being formed to ensure that the local telecoms industry moves forward on NGN development in a coordinated way.

NGN UK is a member-owned and funded body with a lot of similarities to ACIF, although it has a broader membership base.

In tandem with the establishment of NGN UK is a review of the body which currently oversees the technical aspects of network interoperability – the NICC.

The intention of that review is to find an arrangement which would give the NICC a greater degree of industry ownership.

So it is clear that the approach being adopted in the UK is based on giving the industry itself a leading role in developing the vision and framework for the transition to NGNs.

Minister Coonan has given our industry in Australia a similar opportunity.

In order to ensure we take maximum advantage of that opportunity, ACIF has taken a number of steps recently that are designed to enhance our capabilities to lead the industry's response to the NGN challenge.

Those of you who have heard me speak at other events recently will know that ACIF does not consider itself a regulatory body any more.

We believe we can be more productive by working with the industry to promote responsible business behaviours.

Also, we are no longer content merely to respond to emerging issues.

Instead we want to take a proactive leadership role in bringing the industry together to initiate strategies that address issues before they become problems.

The NGN framework offers an excellent example of that philosophy being put into practice.

Previously issues like VoIP and NGN, could have commanded months or years of time analysing every aspect, eventually developing a set of industry codes or technical standards.

That type of approach was good enough at a time when technology lifecycles were measured in five or ten year blocks.

However today's ICT world doesn't even acknowledge the concept of a "lifecycle" because technologies and services are continually evolving.

The time demand on companies and individuals is another factor that needs to be taken into account.

Code development requires an enormous sacrifice from the industry participants.

We need to be sensitive to the fact that the industry can't continue to provide valuable people to sit around a table for months on end examining every little detail of a new code

Therefore we need fast, flexible responses that don't eat up vast amounts of resources.

Instead of focusing on developing new codes and standards, ACIF is tackling VoIP and NGN differently, acknowledging that it may be too easy for standardisation but there is still a need for guidance.

For example, we have developed a rapidly growing number of fact sheets that provide basic information about VoIP and related issues for service providers and their customers.

These fact sheets take only days to produce and they can be distributed electronically as well as made available through the ACIF website.

Similarly, we have developed a Basic Guide to VoIP Technical Terms and Issues.

The Guide was developed for providers of VoIP services to help them supply information to their prospective customers.

It seeks to offer a base set of terms that can be consistently used across the industry.

Like most of our facts sheets, this guide was suggested by participants at the ACIF VoIP Forums in 2004 and 2005.

Our newly launched series of Future Forums is an extension of that concept and no doubt they too will spawn a range of spin-off initiatives.

So the ACIF of today has become much more nimble, more responsive and more in tune with the needs of the NGN world.

This week we hope to see another stage in our evolution unfold when our members vote on a resolution that would see the creation of the Communications Alliance, a new peak industry body to lead the NGN transition.

As I mentioned earlier, there are a lot of similarities between ACIF and NGN UK, except that the latter has a broader membership.

Earlier this year we began addressing that problem by taking in the Australian VoIP Providers' Association.

If all goes according to plan tomorrow, the Service Providers Association (SPAN) will also join with ACIF to form the Communications Alliance.

The outcome would be that the Australian communications industry would have the most broadly-based representative body in its history.

It will firmly cement our position as the neutral forum in which the industry can come together to resolve its differences, to plan its future direction and to offer a unified voice on the important issues of the day.

At present the most important of those issues is the development of the NGN transition framework.

What might that framework look like?

As with any strategic plan, it will identify goals and objectives.

It will define the actions required to achieve those goals and objectives.

It will assign responsibility for undertaking those actions and it will scope out the resources and costs associated with those activities.

There will also be timelines attached to each of those activities.

That is the shell of the transition framework but we still have a long way to go before we can fill in the detail.

We expect to be a lot closer to fleshing out that detail when we have completed our series of Future Forums and compiled our report at the end of the year.

I think I've covered most of the process and technical issues that will need to be addressed.

However we should not forget the human element.

After all, these new networks and services need people to deliver them and they need people to use them.

When Professor Mark Armstrong prepared his 2004 report on VoIP he identified the biggest challenges as being the cultural problems of bringing together the telecommunications and IT sectors.

Make no mistake about it, both sectors have a vastly different cultural tradition.

One has historically been very process-driven, methodical and slower to change.

The other has its roots in a culture that thrives on fast decision-making, entrepreneurial thinking and less concern with getting it right the first time.

To integrate the different levels of infrastructure, applications and content needed to deliver NGN services, these sectors will all have to work together and find a common language.

The good news is that they have been thrust together for a few years now, ever since the Internet and more recently, VoIP, brought the two industries together.

So, many of the differences have been ironed out and we are proposing the development of the environment.

As the experience of the past few years has shown, I think the key to successfully channeling the skills of these two groups is for them to remain focused on common outcomes rather than differences in their preferred processes.

The other issue relates to uncertainty about what specific NGN services end-users actually want and are prepared to pay for.

In the discussions we are having with service providers, there appears to be a distinct lack of clarity about the applications that will make NGN networks commercially successful.

Nobody seems quite sure if services like IPTV, IP videoconferencing, online gaming etc are sufficiently attractive to the Australian population to make them pay a premium to receive those services.

Even the consultants are admitting that they are not at all confident about their predictions relating to the applications that will drive the adoption of NGN services.

The upshot of that uncertainty is that we have a sort of chicken and egg situation.

Which comes first – the design of the network or the development of the applications that will run on that network?

The network architects are saying they can't design the networks until they understand the needs of the applications that will run over those networks.

And the applications developers say they need to wait until they see the architecture of the network.

What will probably happen is that the development of the applications will largely occur in parallel with the development of the networks.

So it appears likely there will be a fair degree of guess-work on both sides over the next few years.

As we know from recent history, understanding the human element and predicting demand is an exercise that is guaranteed to throw up a lot of surprises for us all.

Sometimes those surprises turn out to be positive and other times, they are a nightmare.

One thing is certain – over the next few years we are in for some hair raising times as our industry battles its way into the new era of converged IP networks and services.

At this stage we don't know how long it will take to reach the other side of the chasm.

We don't really know what to expect during the journey or when we arrive.

What we can do at this stage is to take as many precautions as possible.

We must plan our trajectory meticulously and then leap into the future with full knowledge that we have done all we can to land safely in the new world of next generation networks.