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<td>Author(s)</td>
<td>Constanzo, Paddy</td>
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Paper No. 21
Paddy Constanzo
Director
CPK Communications

MEDIA CONVERGENCE AND COMPETITION

AMIC 9TH ANNUAL CONFERENCE
THE DIGITAL MILLENNIUM: OPPORTUNITIES FOR ASIAN MEDIA
June 29 – July 1, 2000, Singapore
MEDIA CONVERGENCE AND COMPETITION

Paddy Costanzo, CPK Communications Pty Ltd

9th AMIC Conference – The Digital Millennium: Opportunities for Asian Media
Singapore, 29 June to 1 July 2000

With the dawning of the new millennium, the exchange of information has become the single most important component of any business transaction. As a result, the world’s separate national economies are being transformed into an information-based global economy in which everyone and everything is interdependent.

This process has variously been described as a “revolution” ushering in the information age or the information economy. Governments around the world have, not surprisingly, taken a keen interest in this transformation as their policy makers struggle to stay ahead of the changes. They have been seeking to ensure that the benefits that flow from the information economy are made available to as wide a cross-section of the community as a whole.

This is not an easy task. Convergence of the telecommunications, broadcasting and computing sectors has made the historical approach to policy making and regulating in these sectors obsolete.

This essay seeks to explore the options that are open to policy makers and regulators as they struggle to ensure that policy and regulation remains relevant in the information age.

Technology has undermined government’s ability to manage the information economy through regulation. Communications and information services have been de-coupled from their delivery infrastructure. For example, telephone services can and are being delivered over coaxial cable, data services through telephone lines and television through direct broadcast satellite.

Convergence has important implications for policy makers and regulators. It has exposed the outmoded assumptions behind the traditional regulatory model for telecommunications.

Traditionally, telecommunications has been treated as a public service delivered through a network that is a natural monopoly. Competition has eroded this model to the point where it only remains in place in very few countries. New operators have entered the market from other utility sectors, service suppliers have looked beyond their national boundaries and the resale of network services has become a significant business as network ownership and service delivery have come to be viewed as two distinct businesses.
The traditional approach to content regulation in broadcasting is also under stress because of convergence. In broadcasting, standards of decency, protection of intellectual property and preservation of cultural heritage have been the targets of policy makers and regulators. In contrast, telecommunications regulation has traditionally been silent on content.

In the information technology sector, the Internet has grown and spread in a relatively regulation-free environment. Most of the regulatory activity has focused on defining standards for the formats and protocols necessary to operate the network. As commercial presence on the Net continues to increase, regulatory issues relating to infrastructure and services as well as content are starting to assume a greater importance.

Despite the considerable challenges facing policy makers and regulators in the convergent world of the information economy their leadership is of vital importance. Policies, regulations and legislation must create an environment that nurtures the further development of the information economy. Such an environment must protect public interest, promote investment and competition and support the continuing availability and diversity of high-quality, low-cost information services and products.

The role of governments must also include the provision of incentives for the deployment of infrastructure, defining regulatory arrangements and institutional responsibilities and establishing an effective regulatory environment to direct the growth of the information economy while resolving conflicting objectives and interests.

Convergence between the Internet and the PSTN requires redefining and rationalising the rules and boundaries of existing regulation. In a convergent world, content providers should be able to deliver content in a technology-independent manner, free from the constraints of regulatory regimes applicable historically to telecommunications, broadcasting and the information technology sectors. The level of regulatory intervention needs to be reduced to that which is necessary to allow the market to function. That is, regulation must be directed at generic service descriptions and be technology neutral.

One of the questions that arise for governments as they seek to re-direct their policy making and regulatory efforts to extract maximum economic benefit from their communications sector is the appropriateness of existing institutional arrangements. The governments of the Asia Pacific region have led the way in considering this issue. Convergence and its implications for historical institutional arrangements has been the subject of much consideration and debate in Hong Kong, Malaysia, Singapore and the Philippines. Already Hong Kong, Malaysia and more recently, Singapore have re-cast their communications and regulatory administrations to encompass all the convergent sectors.

This trend towards creating a regulatory administration that can encompass all the convergent sectors of the information economy will only continue as governments seek to re-focus their regulations on achieving competitive outcomes in the delivery of services rather than the traditional approach of focusing on the transmission technology in use.
Convergent regulatory regimes will seek to achieve:

- competitive market based solutions;
- minimal government intervention;
- equitable access for all citizens;
- to extent possible, industry self regulation;
- technological neutrality;
- consistent treatment of on-line and off-line transactions;
- harmonisation with international practices; and
- competitive access to facilities for all players.

The other issue likely to pre-occupy governments is access. What competition policy and interconnection rules need to be put into place in a convergent environment?

Most countries around the world have relied on new market entrants and resellers as catalysts towards creating a competitive telecommunications market. For this reason, no aspect of a country’s telecommunications regulatory regime has had more bearing on the success of competition than the interconnection rules. In a convergent world, the interconnection of networks assumes even greater importance.

The most important underlying philosophy of interconnection in a competitive market is the obligation falling on players who own infrastructure to not use interconnection as a means to creating artificial barriers to entry or to drive new players from the market place.

The interconnect regime has to be focused on delivering fair and equitable access to networks, facilities and services to achieve any to any connectivity. Standards need to be open to all to ensure interoperability within the converging sectors.

Convergence should not lead to more regulation. Convergence should enable competition at the infrastructure level, and enable a range of new services that are technology independent.

As the trend to liberalisation spreads throughout the world, governments are finding they have to re-think their approach to regulation or risk being left behind. This trend will mean that eventually the artificial barriers set up by regulators to differentiate cable television, telephone networks and satellite services will collapse. The winners will ultimately be those countries that are able to re-cast their competition policy and regulation to foster competition in cost, quality, variety, reliability and choice.
Media Convergence & Competition

Presentation to the 9th AMIC Conference
The Digital Millennium:
Opportunities for Asian Media
Singapore, 29 June – 1 July 2000

Paddy Costanzo

Media Convergence & Competition

- Competition Drivers
- Current Industry Environment
- Turning Point
- Network Evolution
- Internet Growth
- Barriers to Growth in Asia Pacific
- Regulatory Challenges
- Convergence

- Future Regulatory Structures
- Guiding Principles
- Access
- Importance of Interconnection
- Any to Any Connectivity
- The Convergent Future
- Conclusion

Competition Drivers

- Communications (telecommunications, media and information technology) recognised throughout the world as underpinning economic development
- WTO Information Technology Agreement (ITA) leading to free trade in most IT&T “products” within 5 years
- Rapid technological development
- Explosive growth in data
- Information economy/society
- Convergence
Current Industry Environment

- Highly competitive
- Proprietary systems replaced by open architectures
- Shorter product lifecycles
- Unpredictable future
- Convergence catalyst for change and growth
- Data networks and Internet evolving as a reliable, stable platform

Turning Point

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</tr>
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<td>1995</td>
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Source: Nortel Networks

Network Evolution

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<th>Change</th>
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<tr>
<td>Data</td>
<td>20</td>
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Source: Nortel Networks
Internet Growth

Barriers to Growth in Asia
Pacific

- Internet penetration is growing
  - fixed lines gap remains significant
- Low personal computer penetration
- Cost of internet services
- Access capacity
- Markets will stall if constrained by regulation
- Need for new policy framework

Regulatory Challenges

- Convergence between internet and PSTN requires redefining and rationalising the rules and boundaries of existing regulation
- Significant risk that regulators will make serious mistakes that may have future economic impacts
- Minimising the extension of existing regulations
  - the level of regulatory intervention should be reduced to the level necessary to allow the market to function
Regulatory Challenges (continued)

- Regulation can misdirect investment leading to increased costs to consumers, business and government
- It can also slow infrastructure deployment or render existing infrastructure obsolete
- Regulation must be directed at generic service descriptions and be technology neutral to maximise economic outcomes

Convergence

- Information technologies creating completely new economic system that is high-speed, knowledge-driven and globally networked
- However, convergence is not just about technology
  - It is about services and about new ways of doing business and interacting with society
- The Internet has been catalyst that has enabled cost-effective convergence of voice, data and multi-media

Convergence (continued)

- Asia Pacific has some of the most technology responsive markets in the world
  - Wireless growth
  - Rapid growth of Asia Pacific infrastructure over the '90s has mostly meant investment in all digital networks
- Convergence of the IT, telecommunications and media sectors is forcing regional governments to recast their communications and regulatory administration
  - ITTB in Hong Kong
  - ITTB in Malaysia
  - IDA in Singapore
Future Regulatory Structures

Technology has undermined government's ability to manage the information economy through regulation:
- Information runs through, over and across geographic boundaries as if they didn't exist
- Leading to rationalisation and re-definition of roles and boundaries of existing regulatory bodies
- Content providers should be able to deliver content in a technology-independent manner, free from different regulatory regimes applicable historically to telecommunications, broadcasting and the information technology sectors.

The emphasis in regulation needs to be on achieving competitive outcomes in delivery of content rather than transmission technology in use.
Such a regulatory environment should:
- Protect the public interest through enhancing competition
- Encourage availability and diversity of high-quality, low-cost information services and products

Important to differentiate between regulation of competition at infrastructure level and regulation of content.
Regulation of content is driven by social and cultural policy:
- Temptation to regulate through imposition of regulations on technology need to be resisted.
Guiding Principles

- Competitive market based solutions
- Minimal government intervention
- Equitable access for all citizens
- To extent possible, industry self regulation
- Technological neutrality
- Consistent treatment of online and offline transactions
- Consistency with international practices
- Competitive access to facilities for all market players

Access

- Should rules applying to switched voice networks apply to packet networks?
  - Media pluralism needs to be encouraged and conditional access technologies monitored to avoid risk of digital broadcasting being controlled by a few dominant providers
  - Regulators need to ensure that interoperability within the converging sectors is achieved through standards that are open to all

Importance of Interconnection

- Most countries around the world have relied on new market entrants and resellers as catalyst to create competitive telecommunications environment
- For this reason, no aspect of a country's telecommunications regulatory regime has had more bearing on the success of competition than interconnection
Importance of Interconnection

In a convergent world, interconnection of networks even more important
There has to be an obligation on existing players to not use interconnection terms, conditions and prices to create artificial barriers to entry or to drive new players out of the market.

Any to Any Connectivity

The goal of any interconnect regime has to be the provision of fair and equitable access to networks, facilities and services in order to achieve any to any connectivity

Considerations
• encouraging new market entrants while maintaining incentives for existing players to invest in new services, infrastructure and price reduction
• ensuring efficient use of resources and avoiding duplicity of infrastructure deployment
• establishing safeguards against anti-competitive conduct
• dispute resolution mechanisms

The Convergent Future

Globalisation of the design, engineering and production of communications "products"
High bandwidth and competitive prices creating potential to locate services at a distance from customers
No service or geographic boundaries
Success determined by price, features and differentiation not volume
Conclusion

Convergence is about multi-media, multiple points of connectivity, about being able to not only communicate but to change, manage and alter information in ways never before envisaged.

• we owe it to future generations to regulate in a way that does not impede the revolution