

# PRF 2011

COMMUNICATIONS POLICY & RESEARCH FORUM

## **Summary of papers and talks**

This is a summary of the issues each contributor to the Communications Policy & Research Forum will be addressing, plus biographical information about each contributor. This is a guide to help people decide which sessions to attend at the Forum. Even apart from the two days of the Forum (7-8 November), it helps the communications community to know about very current analysis and research, and who is doing it.

The information is as supplied by the speakers and authors.



# Keynotes

## Glen Boreham

### Chairman, Convergence Review

Glen Boreham was the Managing Director of IBM Australia and New Zealand for five years until stepping down from the role in January 2011. He successfully managed a business of 15,000 employees and annual revenues of over \$4 billion. In that period, he grew revenue at over twice the rate of the IT market and profits doubled. He has substantial global experience, having worked for two years in Japan—in Asia Pacific roles and over six years in Europe—with responsibilities covering Europe, the Middle East and Africa.

In June 2008, he was appointed as the inaugural Chair of Screen Australia. He is also Chairman of the Industry Advisory Board for the University of Technology, Sydney. He is continuing to work with the Federal Sex Discrimination Commissioner as a member of the Male Champions of Change group of CEOs seeking to promote the increased participation of women in the workforce.

Among Mr Boreham's previous roles are: member of the Business Council of Australia for the past five years; board member of the Australian Chamber Orchestra; and appointment in 2009 to the Information Technology Innovation Council. He completed three years as the Deputy Chairman of the Australian Information Industry Association in 2010. Twice in recent years he was named by the Australian Financial Review in the top five most powerful leaders in information industries.

## Jonathan Holmes

### Presenter, ABC TV's Media Watch

Currently best known as the presenter of ABC TV's *Media Watch*, he has been a journalist for 40 years, in Australia, the UK and the US. He started in BBC TV's Current Affairs Group in 1971. After 12 years working behind the camera on programs like *24 Hours*, *Nationwide* and *Panorama*, he came to Australia in 1982 to be Executive Producer of the ABC's *4 Corners*, where he stayed until 1985. Apart from a brief stint making documentaries in Boston, Massachusetts, and two years in Washington DC as an ABC correspondent, he has lived in Australia ever since. He became an Australian citizen in 1990.

At various times, Jonathan has served as Head of ABC Documentaries, Executive Producer of *Foreign Correspondent* and *The 7.30 Report*, and of Channel Ten's short-lived current affairs program *Public Eye*. He has also been a frequent on-air reporter for *Foreign Correspondent* and *4 Corners*. He has been a nominee for a Walkley Award four times - though never a winner - and, with Jill Jolliffe, won the 1998 Logie Award for Best Documentary. He has hosted *Media Watch* since February 2008.

**CPRF 7-8 November 2011****Topic summaries and biographical notes****1A. Spreading fictions: distributing stories in the online age**

ISR Swinburne panel convened by Jock Given

**Jock Given:** Where do Australians get their audiovisual stories online?

**Marion McCutcheon:** How do Australians pay for their audiovisual stories online?

**Matthew Hancock:** Beyond *Beyond the box office* – audiovisual stories offline and online

This panel will focus on online video in Australia, presenting early results from an ARC-funded project supported by the ABC and Screen Australia.

The central research question is: 'How do Australians get their audiovisual stories and how might they get them in the future?' Responding to the increased emphasis on audiences and distribution in government policy about audiovisual media, the goal is to quantify the changing ways Australians are watching and engaging with audiovisual stories.

The focus on narrative fiction content reflects the high priority given by successive governments in Australia and overseas to policies encouraging the making, promotion, screening and discussion of local audiovisual works, especially feature films, adult and children's TV dramas and documentaries. These policies are based on the high cost of cinema and TV entertainment relative to the revenue-earning capacity of national markets. Challenges to these underlying economics are coming from at least three related directions: technology, audience behaviour and business models.

**Biographical note:** Jock Given is Professor of Media and Communications at Swinburne University's Institute for Social Research and associate editor of the *International Journal of Digital Television*. He was previously Director of the Communications Law Centre and Policy Advisor at the Australian Film Commission. Jock has recently published articles in the journals *Telecommunications Policy*, *Media International Australia*, *Info - The Journal of Policy, Regulation and Strategy for Telecommunications*, *Information and Media*, *Business History* and *Media History*.

**Biographical note:** Dr Marion McCutcheon is a research fellow with the Institute of Social Research at Swinburne University of Technology and a communications economics consultant. She has worked as an adviser and researcher with the Australian Broadcasting Authority, the Department of Communications, Information Technology and the Arts and the Bureau of Transport and Communications Economics.

**Biographical note:** Matthew Hancock has spent over a decade researching and writing media policy in public and private organisations. He is currently Assistant Manager, Strategy and Research at Screen Australia, the Federal Government's primary support agency for the independent screen production sector. Prior to this he was Senior Analyst with Mediascape, a private research firm measuring the impact of print and broadcast media on community perception of public policy. He also spent many years as a contributor to the educational journal *Metro Magazine* and has conducted lectures at the Australian Film, Television and Radio School and NSW TAFE on topics ranging from media participation and representation to content production and release.

## 1B. NBN rollout and impact

chair: Keith Besgrove

**Michael Reede & Justin Jameson:** Impact of the NBN on the communications sector

**Catherine Middleton:** The world is watching: investigating the NBN approach to next generation broadband network infrastructure

**Shara Evans:** Implications and nuances of NBN Co's wholesale pricing and POI locations

### Impact of the NBN on the communications sector

**Biographical note:** Michael Reede is a corporate M&A partner at Allen & Overy with extensive experience in numerous communications sector M&A and commercial transactions and major regulatory proceedings over the last 20 years. He is recognised by independent directories and publications as one of Australia's leading corporate TMT lawyers.

He has worked in the Australian and wide Asia Pacific telecommunications sector for almost 20 years, beginning with the Optus second carrier bid, the establishment of Optus Vision as Australia's first HFC network and a range of other network deployment and regulatory issues. He was also closely involved in the development and restructuring of the Hong Kong communications sector, as well as a range of other Asian markets.

For three years until early 2009 Michael advised the group of carriers that led the private sector bidding process for the original NBN proposal (the G9 carriers and Terria). He has an extensive understanding of the commercial and regulatory models underpinning the NBN.

**Biographical note:** Justin Jameson is the CEO and founder of Venture Consulting. Justin has been a strategy consultant for 20 years, focusing on the media and telecommunications industries for his whole career. He was previously the co-head of the Asia Pacific region for Spectrum Value Partners. He has worked in Australia for seven years and prior to that was based in Singapore and London.

Justin advised the AUSAlliance consortium (AUSTAR, Unwired and Soul) in its regional broadband bid under the previous Coalition Government. Following the election, Justin advised Optus/Terria and the G9 during their bids under the original NBN proposals. Over the last three years, Justin has advised Vector Ltd on its telecommunication strategy, including its participation in the Ultrafast Fibre Broadband proposal (New Zealand's NBN), its bid under the Labour policy that preceded it and Vector's own fibre business plan prior to that. He has also advised Australian, New Zealand and Singapore clients on the likely impact of their respective NBNs on their businesses. Justin has an excellent knowledge of the commercial constructs underpinning Government funded fibre across the region and understands how this is likely to impact the respective telecommunications and media market participants.

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### The world is watching: investigating the NBN approach to next generation broadband network infrastructure

Australia's National Broadband Network (NBN) is a bold, ambitious infrastructure project. Other countries have not committed to the level of public investment that will be required to build the NBN. Instead, many governments favour a model of private sector investment for building next generation broadband networks, and encourage the development of competing network infrastructure rather than enabling competition on a single fibre network (OECD, 2011a, 2011b). While Internet "founding father" Vint Cerf hails the NBN as a "stunning investment in infrastructure" (Bingemann, 2011), noting that he "continue[s] to stand in awe of the Australian Government decision to fund the fibre network" (McDonald, 2011), other international observers are not so positive. For instance Kip Meek, former chair of the UK's Broadband Stakeholder Group suggests that "the case for subsidising superfast FTTH broadband requires heroic assumptions about externalities" and argues that there is a weak case for public intervention (Meek, 2010).

This paper will explore the potential benefits of the NBN approach and outline the critiques of this model of public investment in next generation broadband infrastructure. In particular, the paper will articulate the possibilities the NBN offers as a national infrastructure, one that supports the delivery of trans-sectoral services and enables any qualified party to provide services using the network. The paper will also explore claims, particularly prevalent in Europe at the moment, that there is little demand for next generation broadband speeds. Government and industry calls for more private sector investment in broadband infrastructure will be examined, with the observation that this investment will not be forthcoming if there is uncertainty around demand for such networks.

Examining these contrasting perspectives on next generation broadband investment allows for a discussion of what is unique about the Australian approach, and provides a basis for analysing the NBN model for an international audience. The paper will draw from the author's ongoing research on international models for building next generation broadband infrastructure. The paper will conclude with observations about aspects of the NBN model that could be adopted in other countries, and with thoughts on aspects of international broadband development approaches that could be deployed to further advance the development of broadband infrastructure in Australia.

**Biographical note:** Catherine Middleton holds the Canada Research Chair in Communication Technologies in the Information Society at the Ted Rogers School of Management, Ryerson University, Toronto, Canada. Catherine's research focuses on the development and use of broadband and mobile infrastructures. She is currently completing a project on the development of next generation broadband networks, focusing on open access fibre networks in Australia, Canada, New Zealand and Singapore (with co-investigator Prof. Jock Given, Swinburne University of Technology). Catherine is a frequent visitor to Australia and is a member of the Editorial Boards of the *Telecommunications Journal of Australia* and the *Journal of Information Technology*. She is leading the New Media Challenges and Opportunities research theme for the *GRAND Network of Centres of Excellence* (<http://www.grand-nce.ca>). Links to Catherine's research projects can be found at <http://www.broadbandresearch.ca>, and she is on Twitter as @catmiddleton.

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### Implications and nuances of NBN Co's wholesale pricing and POI locations

Over the past few months there's been a lot of comment on NBN pricing, and in particular the impact of Connectivity Virtual Circuit (CVC) pricing — ultimately resulting in NBN Co offering a discount on CVCs during the ramp up period. But, will this pricing change provide an effective mechanism for lowering the barriers to entry for RSPs, thus enabling strong retail competition?

To answer this and other questions, Market Clarity has designed an NBN Co Bandwidth and Price Scenario Model, which will be used as the basis to illustrate a range of market scenarios. This analysis has drawn attention to several issues which ISPs and policy makers may not be aware of from published information, such as:

- The impact of contention ratios on an ISPs' retail prices - Will the deployment of the NBN result in higher contention ratios than end-users are accustomed to?
- The correlation of CVC pricing to end-user pricing - Was CVC pricing the big problem that many in the industry claimed? Will the recent price changes resolve these issues?
- The correlation of NBN Co purchasing rules and wholesale pricing on an ISP's decision to offer higher speed plans - Are ISPs likely to offer top-end NBN plans?
- What are the pricing and deployment impacts of the ACCC's decision to have 121 NBN Co POIs?
- The ways in which NBN Co purchasing rules might constrain the retail services on offer - For instance, does it make sense to offer services at all the POIs?
- Market Clarity's view of what needs to change in NBN Co's proposed pricing.

**Biographical note:** Shara Evans is a well-known technologist, futurist and opinion leader in the Australian telecommunications market, as well as the Founder and CEO of Market Clarity,

an award-winning telecommunications analyst firm that provides insight, intelligence and advice on all aspects of the Australian telecom market.

Ms. Evans' involvement in the telecoms industry began in the early '80s when she was a software engineer responsible for designing telecommunications protocols and networks. Her technical and business career has included a variety of executive positions with companies such as Alcatel, Sprint, Telenet, GTE and SmithKline prior to founding her first telecommunications analyst firm, Telsyte in 1997 (later sold to UXC-owned GQ-AAS).

Under Ms. Evans' leadership, Market Clarity developed extensive databases, forecast models and geospatial tools for tracking and analysing the deployment Australian telecommunications infrastructure and services — allowing for the presentation of highly complex information in an intuitive geographic (map) format.

## 1C. Understanding and engaging audiences

chair: Franco Papandrea

**Susanne Larson:** Audience engagement with the Special Broadcasting Service

**Bridget Jones:** Connecting:// arts audiences online

**Catherine Griff:** Film audience testing: what the production industry learns from preview screenings

### Audience engagement with SBS

SBS has recently commissioned qualitative research to explore audience engagement with SBS documentary content. This study explores the responses of audiences from a wide range of cultural backgrounds, age groups and geographic locations to two documentary programs *Immigration Nation* and *Go Back to Where You Came From* which explore the challenging issues of Australia's previous racially exclusionary immigration policies and current attitudes to asylum seekers in Australia. These programs both represented unique interventions into prevailing discourses in Australia about immigration.

This research draws on the understanding of media use as part of everyday life.

Documentary programming can provide important resources for discussion and the development of new understandings about difficult and politicised issues. Factual programs can also provide common points of reference for conversations about important issues in a multicultural society (Bird, 2011). These conversations are increasingly happening online (Dahlgren, 2005; Green & Jenkins, 2011; Janssen & Kies, 2005). *Go Back to Where You Came From*, in particular, caused a storm on twitter and other social media sites, trending as the top subject on twitter on the first night of screening, an example of 'spreadable' media (Green & Jenkins, 2011).

Audience theory tells us media is social. It is understood through interpretation and interaction. Marie Gillespie's work on 'TV talk' has explored how meanings of media texts are negotiated and contested via interactions with others and how they assist in the generation of new identities (Gillespie, 1995). Roger Silverstone asserts that "experiences are real, even media experiences" (Silverstone, 1999: 9) and describes how narratives interact with 'everyday discourses' of gossip, rumours and casual interactions interdependently to 'frame and measure experience' (Silverstone, 1999: 11). These frameworks are useful for developing understandings of what John Hartley has described as the simultaneously individual experience and collective behaviour of television viewing (Hartley, 1992).

The experience of viewing and interpreting television is interwoven with social and political roles in a range of ways (Liebes & Katz, 1993: 20). Audiences draw on their own personal experiences, histories and identities in generating meaning out of television content. This study includes the perspective of ex-asylum seekers, recently arrived migrants, long term migrants (products of postwar migration), second generation Australians and Anglo-Australians.

Drawing on discussions in the groups, the analysis suggests that the programs provided resources around which audiences could develop understanding, empathies, identifications or reactions which assisted them to negotiate their responses to important social issues. The documentaries in this study provide examples of media as "...resources for talk, for recognition, identification, and incorporation as we measure, or do not measure, our images and our lives against those we see on the screen" (Silverstone, 1999: 18). These resources are particularly important around 'difficult subjects' in a complex multicultural society. John Mepham (1990: 60) has called such resources 'usable stories', stories which can assist us to "make imaginatively informed choices and responses to other people" and to "articulate our feelings and aspirations". This study, proposed for presentation at the CPRF, explored how audiences have articulated their responses to these programs as catalysts for conversations about multicultural society.

**Biographical note:** Susanne Larson is Manager, Policy & Stakeholder Relations at SBS. With broad expertise in the screen industry, she has held senior positions at Ausfilm and SPAA. In addition, she has acted as a consultant to the AFC, FFC, Screen NSW, Screen Victoria, SPAA, the AWG, Metro Screen, NITV and the federal and state governments. Policy interests include Australian content, gender and the media, especially children's television; public broadcasting, and regulation of new media.

She is Chair of the Media RING (Reconciliation Industry Network Group) and on the federal government's National Media and Mental Health Group.

She was a Rotary Fellow to Macquarie University (MA Communications, Technology and the Law), and a graduate of UC Berkeley – Mass Communications (Hons) and Scandinavian (Hons) where she was a National Merit Scholar and a UC Berkeley Alumni Scholar.

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### **Connecting:// arts audiences online**

This presentation explores the role of online media in the journey that the audience takes when they attend an arts event – from first hearing about the event, through to booking, during the event, and after the event. It reviews the role that online media plays in generating initial awareness of arts events, and highlights audiences interest in engaging with artists and event organizers online. It also explores the high level of activity occurring online after the event – when audiences share video and photos to relive the event, talk with others and recommend the event. This presentation identifies the opportunities for arts organisations to maximise value from online media. Each opportunity is supported by a case study that exemplifies best practice. This presentation will also illustrate the role of social media as a critical vehicle for word of mouth about the arts. It will outline how the power of social media was harnessed through the communications strategy for the research – which was launched online and actively promoted and debated through social media as well as physical forums around Australia.

This work is based upon two studies commissioned by the Australia Council from the research company Nielsen Online. The first was a survey of 2,500 people who attended an art event in the previous year about their experience. The second was a desk top review of the online presence of the 161 arts organisations regularly funded by the Australia Council. Please visit our website to find out more: <http://connectarts.australiacouncil.gov.au/>

**Biographical note:** Bridget Jones is a passionate researcher who loves difficult questions. With over a decade of experience she leads the Australia Council's research team to deliver insights about the arts to marketers, industry leaders, artists and policy makers. Her most recent project was connecting:// arts audiences online which shows the role online plays in the arts attendance journey. She also developed the arts participation research – More than Bums on Seats which provides a comprehensive picture of how Australians engage with the arts. She has worked as a corporate planner, a strategic planner, and a consultant in the telecommunications, transport and government sectors. Bridget was born in Christchurch and has a Master of Arts from the University of Auckland. She enjoys creative writing, visiting galleries and listening to all kinds of music.

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### **Film Audience Testing: what the production industry learns from preview screenings**

The topic of this presentation is test or *preview* screenings, whereby a selected audience views a film prior to its release, at various stages of completion. Sometimes known as *production* screenings due to the focus on story, character and elements that can still be refined.

Test screenings are fertile grounds for enquiry; they allow the creator of the screen experience direct access to an audience, mirroring the public release. Focus group discussion frequently follows pilot screenings, offering an opportunity for the intrepid producer to confront and be judged by the sought after audience.

Producers of screen fiction face a daunting challenge in capturing the attention of audiences. Films are watched on multiple platforms at a wide array of venues. A new perspective is demanded on the part of content creators who seek to fathom and anticipate audience response wherever viewing or interaction takes place. New delivery and information platforms present real difficulties for audience research specialists. The Internet and social media have endowed the audience with a new power, giving it a visibility and voice to express early judgement on screen entertainment.

The presentation reports on my pilot study of Australian screen producers who released feature films in 2009/10. The perspectives of other key roles in the domain are canvassed: distributors who use audience testing to hone marketing; research companies who undertake audience testing and render the results; and the federal funding agency whose policies stipulate a quarantined marketing budget. The chapter also outlines overseas practice, particularly in Hollywood - where testing is virtually mandatory.

**Biographical note:** Catherine Griff went from Bougainville in Papua New Guinea as a journalist and teacher to the Centre for Mass Communication Research at Leicester University to do a masters degree. She was then employed as research associate in the sociology department, on peculiarly British topics such as corporate board networks and football hooliganism.

Catherine has a long track record in media policy and research, working as a consultant in the private sector and for several government agencies including the Australian Film, Television and Radio School, ACMA, and Office of Film & Literature Classification. She has also worked in film and television production as assistant director, coordinator and in casting.

Catherine was Manager of Strategy at the Australian Film Commission and subsequently at Screen Australia for a decade. Currently she is a PhD candidate at Swinburne University, engaged on an ARC project with Sydney University and industry partners Screen Australia and the ABC: *Spreading Fiction: Distributing Stories in the Online Age*.

**2A. Australian TV Content: future challenges**

chair: Debra Richards

**Adrian Lawrence & Allison Manvell:** Promoting the local: regulation of local media in a converged environment

**Rob Nicholls:** Content discontents: cultural protection in an Internet enabled world

**Franco Papandrea:** Sustainability of Australian content quotas in the digital age

**Promoting the local: regulation of local media in a converged environment**

The Federal Government's Convergence Review has flagged that the treatment of local and Australian content is a key policy issue for a converged regulatory regime. The Emerging Issues Paper has posed a series of fundamental questions to be considered in this regard, seeking to explore the range of methods of encouraging the production and distribution of local content.

This presentation will consider and compare the approach that has been taken in a number of other countries to the regulation of local content and local media production, with the aim of distilling some key potential positions in this regard. Whilst there is no single correct approach to regulation in this space, and the questions requiring answers will differ between jurisdictions depending on the nature of the existing regulatory regime, market conditions and underlying social objectives and policies, much can still be learnt from the manner in which other jurisdictions have attempted to approach the task.

Importantly, the presentation will use the local content issue as an example of the potential approaches to a "restructuring" of the framework for media regulation generally. This will involve a consideration of how appropriate policy objectives in respect of local content can be achieved in a convergent model. In particular, the paper will consider approaches to this issue in the context of a "layered" approach to regulation, as compared with the current "siloed" approach.

**Biographical note:** Adrian Lawrence is a partner in Baker & McKenzie's Technology, Communications and Commercial Group. Adrian specialises in Internet and ecommerce law, in particular issues relating to digital copyright and online media. He is a prolific writer and presenter on digital copyright, information technology and ecommerce law, including as the author of *The Law of Ecommerce*, the leading loose-leaf publication on internet law in Australia. Adrian also lectures in the Masters programme at the University of New South Wales in Internet and online media law.

**Biographical note:** Allison Manvell is a senior associate at Baker & McKenzie where she specialises in commercial and regulatory work for media, communications and technology clients with a particular focus on digital media, copyright and content regulation. Allison regularly writes and presents on a variety of issues relating to digital media in Australia, as well as maintaining an ongoing interest in the regulation of content creation and dissemination across the media and arts sectors.

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**Content discontents: cultural protection in an Internet enabled world**

Television broadcasting is a sector where states have used the "cultural exception" to justify cultural protection. In many countries (particularly in the European Union, Australia and Canada) there is state support for the audiovisual services sector. The absence of competition based regulation in the sector along with cultural diversity policies mean that the regulation of broadcasting is an exception in the European School of the politics of regulation.

Rob's paper examines the use of cultural protectionism in television and the challenges raised by alternative delivery platforms for audiovisual services. It does this by reviewing international broadcasting regulation in the context of cultural protection arguments. The paper goes on to consider whether these examples represent current regulatory norms. It then examines these regulatory policies in the context of the challenges provided by internet delivery of television-like services. The paper questions whether there can be protection of the broadcasting sector when television can be considered as merely another aspect of electronic commerce.

The paper concludes by examining some of the power relationships which have led to policy shifts in broadcasting regulation. In particular, Rob examines the extent to which the state can maintain control of cultural policy in an environment where delivery platforms are evolving rapidly.

**Biographical note:** Rob Nicholls is a Sessional Lecturer in international political economy at UNSW and a General Manager in the Communications Group of the ACCC. There he is responsible for the competition regulation of:

- (a) transmission and facilities access;
- (b) mobiles and spectrum; and
- (c) upstream content and applications.

Rob's career has focused on technology, regulatory and business strategy in telecommunications and broadcasting. He previously worked as a consultant for Gilbert + Tobin where he provided advice to governments, regulators, incumbents and entrants in the Radiocommunications, telecommunications and broadcasting space in Asia, the Middle East and Europe.

Rob holds PhD and Masters degrees from UNSW and an honours degree in Electronics and Communications Engineering from Birmingham University. He is a member of both the IEEE and the International Telecommunications Society. He has published a significant number of papers and is the co-author of the Radiocommunications Commentary in Communications, Law and Policy.

He can be contacted at [r.nicholls@unsw.edu.au](mailto:r.nicholls@unsw.edu.au), +61 2 9230 3854 or +61 4 0724 0416.

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### **Sustainability of Australian content quotas in the digital age**

Australian content on commercial free-to-air television is mandated by a system of quotas which specify minimum levels of overall content as well as specific requirements for first-release drama and children programs. In the new digital world the viewing opportunities available to consumers have already been expanded substantially. In traditional free-to-air television viewers choices in digitally-equipped households have increased threefold by multichannelling. In addition, new viewing opportunities are available on the Internet and on mobile devices. Neither the new digital channels nor the Internet and mobile viewing opportunities are subject to Australian content quotas. Future arrangements for Australian television content are included for consideration in the current Convergence Review.

In the digital environment several important factors impact on the sustainability of Australian content quotas. The Internet opportunities are not conducive to Australian regulation as the program sources may be located in foreign jurisdictions. In the multichannelling environment the disparate treatment of a broadcaster's main channel, which is subject to the quotas, and the secondary channels which currently are not, may not be sustainable in the longer term. A different system based on a proportion (currently 10%) of total program expenditure is applied to predominantly drama channels on subscription TV.

The paper reviews the likely sustainability of Australian content quotas for television and prospective mechanisms that may be more conducive to conditions in the future digital environment.

**Biographical note:** Franco Papandrea is Adjunct Professor Faculty of Arts and Design, University of Canberra. In 2009, he retired from the position of Professor of Communication and Director of the Communication and Media Policy Institute at the University of Canberra which he held for some 10 years. He is a leading expert in communication and media policy with extensive experience in the evaluation of related public policies and regulatory practices. He has published widely in the field. He is a Custodian of the Communication Policy and Research Forum and Chair of the Forum's Academic Review Committee.

## 2B. Filling NBN policy gaps

ACS-TSA panel; convenor Peter Gerrand

**Peter Gerrand:** Why we need ACMA leadership to avoid bad NBN user outcomes

**Peter Darling:** The need to upgrade the Universal Service concept before delivering it over the NBN

**Sue Hutley:** Better broadband capability training for the Internet-uninitiated

This panel session will raise and invite discussion on NBN policy gaps that need to be filled to ensure successful social and commercial outcomes in the use of the NBN as it is rolled out over the next decade.

The speakers will draw upon the outcomes of NBN Policy Forums held in June 2011 by the Telecommunications Society of Australia, a chapter of the Australian Computer Society. Those outcomes, published in the August issue of the online *Telecommunications Journal of Australia* (TJA), will be updated by the panellists following any further policy responses or new developments concerning the NBN up to the time of the CPRF.

The June NBN Policy Forums, stimulated by eleven papers on NBN policy gaps published in the May 2011 issue of *TJA*, were designed to get industry reaction and contributions to NBN policy gaps that need to be fixed to ensure successful commercial outcomes together with confident and satisfied customers, as well as to identify opportunities for socially valuable high-speed broadband applications.

The key policy gaps identified so far, to be covered by the presenters, deal with:

- (1) The need for further action by ACMA, as the technical regulator for the telecommunications industry, to provide regulation of end-to-end Quality of Service parameters in order to avoid worst-case service performance scenarios for NBN end users;
- (2) The need to upgrade the Universal Service concept, including an updated specification of the Standard Telephone Service suitable for the NBN environment, before attempting to deliver it over the NBN; and
- (3) Finding more effective ways of providing broadband awareness and capability training for the Internet-uninitiated: particularly for the 25% of households (nationally) and 35% of households (in the non-metropolitan regions) that do not yet use the Internet from home.

**Biographical note:** Peter Darling is the Principal of Pondarosa Communications, a company established to provide services to the communications industry. Peter has had wide experience in telecommunications technology and network planning and in related regulatory and policy areas

Peter has had a long-term involvement in communications technology and standardisation, internationally, regionally and in Australia. He has worked on "Next Generation Networks", internationally via the ITU-T, ASTAP, ETSI and the IETF, and nationally via ACIF/Communications Alliance.

Since the formation of Pondarosa Communications, Peter has undertaken work for the Australian Communications Authority/Australian Communications and Media Authority, the Department of Communications, Information Technology and the Arts, the Australian Competition and Communications Commission, Multimedia Victoria and the Productivity Commission among others. He has provided consultancy about International Standards on a long term basis to the Australian industry via the Australian Communications Industry Forum (ACIF). He managed a two-year project for ACIF conducting an industry-wide forum looking at the technical, commercial, policy and regulatory implications of future network development ("Next generation Networks" or "NGN"). He served as Rapporteur for the NGN Expert Group in ASTAP, the Asia-Pacific Telecommunity Standardization Programme, and ran a major NGN workshop at an ASTAP meeting in Melbourne, bringing together the ETSI Director General, the ITU-T Director and other key participants in the international NGN standards work.

As well as the work with Pondarosa Communications, Peter has been working as a Senior Researcher with the Network Insight Group and has served as Adjunct Professor at RMIT

University. He is a member of the Board of Editors at the Telecommunications Journal of Australia.

**Biographical note:** Peter Gerrand is an Honorary Professorial Fellow in telecommunications at the University of Melbourne's School of Engineering. He was the founding CEO of Melbourne IT (1996-2000) and has been awarded the telecommunications industry's Charles Todd Medal (1998) and an Australian Government Centenary Medal (2003).

He has been Editor-in-Chief of the *Telecommunications Journal of Australian* since 1994, and Managing Editor since converting TJA to an online subscription journal in 2007.

In 1991-93 he headed Telstra's Network Strategy unit, after 20 years in telecommunications industry R&D, before returning to academia. He is author of *An Interconnection Model for Modern Telecommunications* (1998) and *Revisiting the Structural Separation of Telstra* (2004), which served to rekindle policy debate on that topic.

His PhD thesis (2008) on 'Minority Languages on the Internet' has been published by VDM Verlag. He is currently also an Adjunct Senior Research Fellow at Monash University's School of Languages, Cultures and Linguistics, and an Honorary Research Fellow at La Trobe University's School of Historical and European Studies, where he has lectured on modern Spain.

**Biographical note:** Sue Hutley has been the Executive Director of the Australian Library and Information Association (ALIA) since January 2006. She manages the National Office staff at ALIA House in Canberra and is a non-voting member of the ALIA Board of Directors. ALIA's structure includes the Board, Standing Committees, Advisory Committees and Groups. ALIA conducts a range of services, events and conferences and co-ordinates advocacy and public campaigns on behalf of the profession. Prior to taking up this position her library career included management positions in TAFE, special, public and academic libraries.

**2C. Digital inclusion of all: even over-55s**

chair: Lesley Osborne

**Don Perlgut:** Digital inclusion in the broadband world: challenges for Australia**Reg Coutts:** Reading the tea leaves to meet the diverse needs of 'baby boomers' to live independently**Pam Coutts:** So you think you can ignore us? Communication needs of older people**Digital Inclusion in the Broadband World: Challenges for Australia**

This paper discusses the potentially looming "digital divide" in Australia, if concerted efforts are not commenced soon to make certain that poor, remote and vulnerable communities in Australia are not actively included in the fast internet roll-out. The paper examines the NBN Co roll-out timing, reviews pilot "digital inclusion" initiatives in Australia, and compares them to activities and issues taking place in the United Kingdom and the USA.

Now that the much-discussed National Broadband Network (NBN) is underway, many people assume that it is just a matter of time before we are all fully connected. Except that we may soon start hearing a phrase that was in common usage some ten years ago: the digital divide. This concept has slipped from the public radar in recent years under the onslaught of smart phones, iPads, other "tablets" and the bewildering and growing collection of digital devices that will operate under the law of "if it can be connected, it probably will".

The chances of being "online ready" are very low for Australians who are poor, Indigenous, old, disabled or who live in outer regional/remote areas. A key complication of the NBN is that just because you build it, they may not come – to paraphrase the famous tag-line from the Kevin Costner film *Field of Dreams*. Internet access does and will cost money, and it will take some level of finance, technical expertise and digital literacy to gain and maintain that access.

UK research estimates that 8.7 million adults in the UK never use technology, people who are "offline" over-estimate the costs of being online by a factor of three, and the "addressable market" by business is approximately 80% of the population: they will find their own way online. It's the final 20% that really need the help. The situation in Australia is unlikely to be much different, and our vast distances to outer regional and remote locations will only exacerbate the problems. With more than 22,600,000 Australians, even a conservative estimate of 15% digitally deprived residents means that almost 3.4 million Australians will fall on the other side of that divide.

This is not just an information access issue; but a profound economic, public health and social welfare challenge. Without full participation in the online world, we are in danger of relegating substantial parts of our population to generations of compounded disadvantage. Fast broadband will probably be a "game-changer" for society, but with free information services being eliminated, online access is becoming a necessary requirement for full participation in modern life. Australia's "digital inclusion strategy" lags way behind its broadband roll-out strategy. This paper discusses the implications and possibilities.

**Biographical note:** Don Perlgut is a consultant for non-profit and media organisations, writer and film critic, and is currently completing his PhD at Macquarie University. Until August 2011, he was the Chief Executive Officer of the Rural Health Education Foundation, a national non-profit health and medical media organisation. Prior to that, he was a Client Relationship Manager for the Australian Institute of Management and Business Development Manager (Education) for ICE Interactive. He also worked for many years for ABC Television as Head of ABC TV Policy and Project Manager, Open Learning. He has taught in the Department of Geography and Planning, University of New England and a number of other universities. His areas of research interest include film and television distribution in Australia; the intersection between politics, culture, religion and media; and the marketing of not-for-profit organisations. He has a particular commitment to reducing social and economic inequality.

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**Reading the tea leaves to meet the diverse needs of 'baby boomers' to live independently**

The 'baby boomers' of which I am one who were born in the two decades since the end of the Second World War and in our diverse ways have grappled with the evolution of computers, the Internet and mobile phone. The market demand of those born from the 1990's onwards has driven these technologies in further unforeseen directions. My paper framed in this context of generational and technological change is how mobile phone technology is becoming the 'preferred platform' for enabling an aging population to live independently for much longer in their own home. The paper will draw upon recent [Ref 1] research into the understanding of the diverse attitudes and backgrounds of older people that informs their propensity for adoption of these technologies. For example it is very clear from the research that the reasons for adoption of mobile phones is very different from those for adopting the Internet and are far less correlated with socio-economic factors. The paper will also scan technology development and critique the supply side products designed to meet the perceived needs of older people such as emergency pendants and mobile phones with big buttons. This analysis of both supply and demand side has informed the development of a communications service product called Assure Connect™ that can provide an added service feature to any phone system to provide families and groups a communications capability to better support each other. The research approach described in this paper to inform the application context for the Assure Connect™ is akin to 'reading tea leaves' but learning further lessons about the innovation process [Ref 2] where the user is the prime source of innovation.

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**So you think you can ignore us? Communication needs of older people**

Over the next 20 years the number of older people in Australia will not only almost double but will comprise an increasing proportion of the Australian population.

By 2035 those age 65 and over will comprise 23% of the total population. According to the 2006 census currently only 18% of those age 65 years and over use the Internet and whilst there are no census figures for mobile phone use other studies suggest that whilst usage rates are higher they are still low compared to rest of the population. This lower ICT use is also reflected in the figures for those aged 55 to 64 years - the early half of the Baby Boomers demographic, but they have the fastest growing adoption rate across all age groups.

Policy makers will need to find ways to cost effectively support and keep this burgeoning older population connected, active and healthy as long as possible and to ultimately provide more intensive support if and when required. The telecommunications industry has the potential to provide services and technologies to meet the aspirations and needs of this ageing population.

So can they afford to ignore them?

If not then how do we characterise the new communications technology requirements of this diverse and increasingly large population sector. Clearly these will change as the ageing population moves through older age and each generation does and will come to ageing with different experiences of communications technologies. Overlaying these two dynamics are the vertical and horizontal structural differences seen in any population regardless of age group.

How can we, as social science researchers, encapsulate this dynamic and interrelated complexity in a meaningful way for policy makers, service providers and technology innovators?

The research presented here suggests a characterisation schema of five interrelated life domains, notably, life style, life stage, generational, gender and cultural experience. These life domains change as the ageing population moves through older age influence the value proposition that older users, non-users and potential users attach to new communications technologies. Data is drawn from an analysis of a random sample survey of a diverse population of 550 older people aged 55 to 85 years in western metropolitan Adelaide together with 30 interviews with older people from a CALD background who had low proficiency in English.

**Biographical note:** Prior to research Pam was an educator for 16 years and then re-qualified in Human Services Administration in which she was responsible for establishing and evaluating a regional community support programs in South Australia and Victoria and in the latter contributed to the development of a state wide policy of regional programs. Her interest in influencing policy change from the user experience upwards led to her first research project which identified the potential of telephone and online networks for delivering community health support and information to older rural and isolated women. Since then she has applied her user needs research methodology to identify the potential for ICTs to engage users (and non users) in applications as varied as mobile community support, Teleworking, mobile working and m commerce. She is committed to promoting *research based* policy and practice whether for commerce or community. She is currently applying these skills and knowledge to investigate older peoples' use, non use and potential use of digital technologies for a doctoral thesis at the University of Adelaide. Her research project is funded by local, State and Federal government. Pam has been attending the Communications Policy Research Forums for over 10 years and this is her 6<sup>th</sup> time as a presenter.

### 3A. Copyright in the connected digital world

chair: Debra Richards

**Michael Fraser:** Copyright in the digital networked era

**Rene Sumner:** Why we need a functioning legal digital market

**Gail Grant:** The piracy bus, who's on it? – consumer attitudes to movie and TV theft in Australia

#### Copyright in the digital networked era

Copyright owners now recognise that the internet is an embedded channel for consumption of all forms of content. With the rollout of the \$43 billion NBN network, just launched in mainland Australia, and a projected 90% penetration rate in Australian households, the importance of online content in Australia is likely to increase. Yet the improved broadband speed delivered by the NBN offers opportunities to the creative industries.

We have two basic components for a thriving online knowledge economy – a superfast NBN and creative content creators and producers. But we need copyright reform to enable a viable market for content online and a National Content Registry as the basis for a National Content Network which can provide a secure market framework for online content and rights transactions.

Our current content business models don't meet consumer demand so they are incapable of fixing the market failure. We need to devise business models that respond to the nature of the web, meeting consumer demand by allowing instant access to any content while simultaneously enabling a rights transaction for downstream uses. Such a framework can fulfil the purpose of copyright law by rewarding content creators and ensuring that copyright continues to act as an incentive for the creation of original content while giving consumers easy access.

An online digital copyright Registry, as the hub for a National Content Network, is the basis for a sustainable market for content through new distribution channels for Australia's content industries. An active rights Registry would connect consumers directly through the web to content and the rights to copy and communicate the content. It would attract consumers by delivering them a service that meets market demand for easy, lawful access to content, while providing creators with better security from piracy and encouraging them to invest in new online content services.

Although the technologies required for implementing the NCN already exist, no one proprietary interest will build a network content infrastructure because it will increase competition. It is the responsibility of government will need to establish the national content infrastructure. Just as government set national standards and established national and international interoperable infrastructure as a catalyst for the industrial revolution, so similar reforms are required, at the inflection point for content industries, to give Australia an advantage in the information revolution.

The government will need to invest in a national social infrastructure for a knowledge economy and mandate interoperable access standards to allow seamless network access to content across the media wherever it is stored. Reform of the *Copyright Act* would also be a basic building block to encourage registration of copyright content to facilitate the National Content Network (NCN), in a manner that complies with Australia's treaty obligations.

A National content Registry which establishes a Content Network would realise the economic and social benefits of the NBN by setting up a content market place. By providing network architecture for increased national productivity and reduced costs for all knowledge workers, creators, consumers and the wider economy, the long-term benefits for Australian creative and knowledge-based industries would be significant.

A National Content Network is a proposal for a nation-building project that will help deliver to Australians the social and economic potential of superfast broadband. Most importantly, the NCN has enormous potential to generate creativity and wealth in content industries. The return on investment the NCN promises will help ensure the survival of sustainable creative content industries by providing a market solution to the challenges posed by online content consumption.

**Biographical note:** Michael Fraser is Professor of Law and Director of the Communications Law Centre, UTS. He was a founder and CEO of Copyright Agency Limited (CAL) for twenty one years and a founding director of Australian, foreign and international copyright management organisations. He has influenced change in copyright and commerce for creators and the content industries, as well as media and communications policy in the public interest. Michael has pioneered new digital content delivery, e-commerce business models and value adding virtual supply chains for content and rights. He contributes to government policy development and is an international speaker. Michael is Chairman of Australian Communications Consumer Action Network (ACCAN), President of the International PEN - Sydney Centre, Chairman of the Stolen Generations Testimonies Foundation and a director on the boards of the Faculty of Law, University of Technology Sydney, the Australian Copyright Council, a Member of the Telephone Information Services Standards Council and a Member of the Steering Committee for the Review of the Telecommunications Consumer Protection (TCP) Code.

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### **Why we need a functioning legal digital market**

Everybody agrees that adequate enforcement measures are certainly part of a solution to illegal file sharing and hence a functioning digital legal market. But only economic rights holders' seem to be convinced that enforcement only focused approach is sufficient. Their perspective however intentionally ignores one key precondition for any market to function properly - that is in this case, the necessity of a well functioning supply of legal digital content to consumers.

This is also why an enforcement only focused approach will continue to fail to solve the root cause problem of illegal file sharing that is the prevailing market supply failure of legal digital content i.e. lack of adequate licensing of digital legal content.

This supply failure is a result of; a) limited availability of legal digital content, b) technology specificity of copyright potentially hindering innovation and c) unreasonable transaction costs making digital content unnecessarily and relatively more expensive.

#### *Copyright is not the bottle-neck?*

Copyright law does not in itself prevent right holders from commercializing digital works (i.e. digital content) on for instance a multi-platform/multi-format basis, in competition in early release windows; cost efficiently or across multiple territories. Instead, the problem lies in economic rights holders' conventional commercial and contractual practice i.e. licensing of copyright protected works (in particular audiovisual and film). This is why the market supply failure of legal digital content is strictly speaking not a copyright issue but rather a market conduct issue (licensing behaviour of economical right holders).

#### *Why do we need a digital copyright reform?*

A non-legislative approach to solve the market supply failure will most likely be insufficient, since there are currently no legislative obstacles preventing right holders to address the digital market supply failure. In other words; enablers exist but incentives (enforceable) are missing. This is why Australia needs a digital market reform.

Questions concerning investment protection, not necessarily for creators but certainly for economic rights holders, have always been in the prime focus of copyright but questions regarding fair competition, consumer choice and the efficiency of the market have traditionally had at the best a secondary position. This is why Australia needs a digital market initiative, i.e. it is time to answer at least these following questions:

- Are consumers given a fair choice of what, how and when they access legal digital content?
- Is there effective competition in the markets, especially in the supply of digital audiovisual works and music?
- Are transaction costs in the digital market appropriate or higher than necessary?
- Should consumers pay more than once for a digital content service if it is made available on multiple platforms/screens?

*What should the Digital Market reform address - a solution for a well functioning supply of digital legal content!*

Consumers should have access to legal, timely available, competing and wide ranging choices of affordable content offerings (audiovisual, film, music, books etc). In addition they expect to be able to make a free choice of when (time-shift),how (device shift) and where (place shift) to consume content of their choice. However, this is exactly where the conventional business conduct of economic rights holders' has been unable to respond adequately. Consumers' preferences have changed but most economic rights holders have unfortunately been unable to respond adequately.

It is time that the market supply failure is resolved once in for all! By revising the copyright law but also consider equally importantly following measures;

- Increase the role of media regulation to stimulate the growth of on- demand whole sale programming market.
- Increasing the role of competition policy in the supply of digital legal content
- Formulating new "digital" conditions regarding public funding of Film/Media productions and digital conditions related to local content quotas.

**Biographical note:** Rene Summer is a Director of Government and Industry Relations at Ericsson Group. He has a global responsibility in formulating Ericsson's views in the policy area of media, content, copyright, media convergence, IPTV and mobile TV. He is also General Manager Government Affairs in Australia and New Zealand, responsible for spectrum, telecom and media/content regulation. He is also board member of Internet Industry Association (IIA) in Australia. Previously he has held a number of different assignments across different Ericsson Business Units and Market Units, such as Director Sales Strategies and Senior Market Analyst. Rene Summer holds an MSc degree from Reading University UK, in International Business and Finance, with focus on topics like Business Strategy and Economic Policy.

### **The piracy bus, who's on it? – consumer attitudes to movie and TV theft in Australia**

On the one hand, the media around Movie and TV theft (piracy) in Australia is populated with disturbing statistics which; to anyone involved in investment, production or distribution businesses; appears to be an overwhelming tsunami threatening to engulf the industry.

On the other side of the discussion/debate there are the journalist, bloggers and pro-internet freedom proponents who describe such statistics as self serving hyperbole. These vocal activists blame "the Studios" for not embracing new technology and not establishing new business models fast enough to meet consumer's needs.

So what is the real story in Australia?

IPAF Research

The Intellectual Property Awareness Foundation (IPAF) is an alliance of businesses and organizations that have developed consumer and education programs which aim to increase awareness for the cultural, creative and economic value of the Australian Film and TV industry. A major objective of IPAF is to regularly – every 12 to 18 months – commission independent quantitative and qualitative research into the trends and attitudes of Australians about this issue.

The research began in 2008 and has run in 2009 and 2011. The quantitative approach is through Newspoll nationally with an on line poll of 1644 respondents. The qualitative sessions consist of 6 groups within 4 age brackets held in Sydney and Melbourne run by Sycamore Research and Marketing.

The most recent survey in market over February and March 2011 introduced an activity diary and an innovative projective technique to the qualitative groups aimed at providing new insights into the public's view.

This innovative technique asked participants to draw a “Piracy Bus” and depict who was driving, who was on board, where they are sitting and the signs or the road along the way. Three key themes emerged:-

- It's a community bus
- I pirate – but I'm not really on the bus
- None of this would be possible without the ISPs

The presentation will share a selection of the “bus” drawings along with quantitative data tracking trends over the four year period. It will also aim to outline a vision of what the Australian public's attitudes and behaviours are to this issue. This consumer based vision may assist communication academics, business leaders and the government in their understanding of industry and consumer needs for the future.

**Biographical note:** Gail Grant is hooked on the film and TV industry in Australia and, in a career spanning 28 years in various roles, she is still passionate and energized by both the product and the people in that industry.

Currently Gail is the CEO of the Intellectual Property Awareness Foundation (IPAF) – tasked with developing, creating and implementing the consumer and educational activities of the organisation. IPAF are a not-for-profit organisation created and solely funded by the film and TV industry in Australia. Our purpose is to raise awareness and respect for Australian content and the businesses and people who depend on it for their livelihoods. Our members include major studios, independent studios/distributors, national and independent cinemas, the MPA, Foxtel, Austar, Screenrights and many others. IPAF reach the Australian public through free and online education resources and our public education campaigns.

Prior to IPAF, Gail consulted in the position of Marketing Director for Sony Pictures Home Entertainment during 2008/2009. From 1983 to early 2007 Gail worked with 20th Century Fox Home Entertainment in a variety of roles and responsibilities. Her primary contributions during her time with Fox Home Entertainment came with the role as Marketing Director and member of the Executive Team for over 10 years.

Based in Sydney, Gail can be contacted on 02-8458-3325 and [ggrant@ipawareness](mailto:ggrant@ipawareness).

**3B. Facing the explosion of TV platforms**

chair: Peter Leonard

**Kursten Leins:** Multi-screen TV: single regulatory framework?**Trevor Barr:** Disruption revisited: Netflix, Apple TV, Google TV, Facebook TV**Toija Cinque & David Marshall:** Visual networking: keeping television on the box**Multi-screen TV: single regulatory framework?**

Media convergence and the closely associated multi-screen TV and video distribution is not just about technology. It is about new services for consumers, new ways of doing business, new types of media products and new ways of interacting with end users. The new and fundamentally different market and business conditions that are evolving mean that regulatory regimes must also evolve. Contrary to traditional broadcasting policy, which seeks to allocate scarce spectrum fairly, a multi-platform audiovisual policy approach needs to recognize the fast-growing availability and accessibility of audiovisual content that is possible in an environment with various complementary or alternative networks. In a multi-platform environment, the same rules and standards should apply to all technologies and distribution platforms. Media policy regulation should be technology-neutral and platform-independent: in other words, regulation of audiovisual media services should function irrespective of the underlying platform or means of distribution.

**Biographical note:** As General Manager of Strategic Marketing at Ericsson Australia & New Zealand, Kursten Leins is responsible for development and execution of marketing strategies for Ericsson products, solutions and services. He works closely with telecom operators, media companies and select industry verticals to identify new business opportunities, within Australia, New Zealand and South East Asia.

Kursten has previously held positions within Ericsson in the areas of marketing, professional services and project management. He has gained broad experience across a diverse range of projects within Australia and abroad, including wireless, wireline and multimedia domains.

Kursten holds an MBA from RMIT University, Bachelor of Electronic Engineering and Bachelor of Computer Science from La Trobe University, Melbourne.

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**Disruption Revisited: Netflix, Apple TV, Google TV, Facebook TV**

This paper canvasses notions about innovation related to Internet Television, not Internet Protocol Television (IPTV), which is so widely seen as a major new application for NBN Co. It constructs four business models of Internet television related to the recent innovation offered by four American based corporations, each of whom is relatively new to television. It offers an analysis of Netflix as the aggregation model, Apple TV as continuing its iPhone walled garden business model but this time for television, Google TV where convergence for television would be free, and also of movies becoming available on Facebook, the progressively more ubiquitous social media site. None of these players are original television content creators. All are highly dependent for content on the established commercial television networks in the USA, whose management face complex dilemmas as to whether it embraces the opportunity to make more programming available to new outlets, but at no risk to their programming rights, or to their lucrative advertising base.

So how transformational might these changes become? Greater network capacity will facilitate better video downloading, and be a catalyst for possible substantial institutional change to the Australian television industry in the long term. But what might be the opportunity versus disruption equation here in the context of NBN? The development of Internet television, and how it comes to compete or co-exist with IPTV, may be a broadband game changer, not only in the USA but also eventually for Australia.

**Biographical note:** Trevor Barr has authored four well known books in the media and telecommunications field, published by Oxford University Press, Penguin Books, Allen and Unwin, and Rigby. He was a Program Manager for the Smart Internet CRC where his research work included the futures review *Smart Internet 2010* (with Alex Burns and Darren Sharp) launched by the Hon Helen Coonan, Minister Of Communications, Information Technology

and the Arts at the ICT Outlook Conference in September, 2005, and later presented to an OECD Forum in Paris in March 2006. He was awarded the Charles Todd Medal in 2007 presented by the Australian Telecommunications User Group. More recently he has researched the National Broadband Network project as a Chief Investigator for the ARC Centre of Excellence for Innovation and Creative Industries.

Trevor has been employed as a senior adviser or consultant by a number of government and industry bodies, including the Commission for the Future, Telstra, and Ericsson Australia. He was the inaugural Director of the Australian Electronics Development Centre, an initiative of the Commonwealth and Victorian governments to develop small and medium sized companies in information based industries. Known as a national media commentator for a long period, he has appeared on ABC Radio, for AM and PM, Background Briefing, and also with Australia's leading news and current affairs television programs, including Four Corners and the 7.30 Report.

Trevor has spoken at international conferences in Tokyo, Bangkok, Glasgow, Paris, Seoul, Beijing, New York and London. He was the Consumer Co-Chair of the Telstra Consumer Consultative Council (TCCC), an advisory body to Telstra for five years, until 2008. These days, he is taking things easier!

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### **Visual Networking: Keeping Television on The Box**

The AUD43 billion Australian National Broadband Network (NBN), to be set up by the wholly Federal government owned NBNCo Limited (NBNCo), is the largest infrastructure project ever proposed in Australia. It has the capacity to combine features and technologies that were once separate, but now have converged including computing, telephony, free-to-air (FTA) television, direct-to-home satellite broadcasting, radio, and the internet. This means that current thinking about these media technologies developed through the process of convergence as well as regulation requires review as the nexus between content and place is dissolved. And this is exactly what is happening with the Department of Communications, Broadband and the Digital Economy's (DCBDE) convergence review because converged media technologies have the capacity to radically change perceptions of traditional broadcasting (among other media and entertainment forms) through the additional and interactive services that are possible via the one unit. The term converged media comprises content that is created, stored, or retrieved in digital form ranging from text, still pictures, audio and video. Specific examples have included for some time the internet but now the newer Connected TV or SmartTV, smartphones (the iphone for example) and tablets like the ipad. These converged media can each offer audiences access to video and audio on demand as well as interactivity and connection to the internet with 3D services being considered for television. The recent multichannelling services for the digital television now replacing current analogue services in Australia certainly offer a diversity of additional program content that expands aspects of the broadcasters' activities, but does not provide truly new services that are considerably different from those of traditional broadcasting. Technologies that could allow broadcasters to remain competitive and establish the future of television program content delivery to a broader Australian audience is Internet Protocol Television (IPTV) where IP programming is delivered to the home set-top-box via a high-speed broadband network such as the NBN or Internet enabled television (ITV) over the public internet. This is because future services for digital television are going to be more akin to app-based functions that are currently available on mobiles and tablets but on the television screen rather than the PC. Against such a background, this article examines the future of television arguing that faster broadband and internet-enabled televisions to watch movies and programs when it suits the audience are the keys to the television's survival.

**Biographical note:** Professor David Marshall is the Head of School, School of Communication and Creative Arts and Chair in New Media, Communication and Cultural Studies at Deakin University. Professor Marshall (PhD McGill University - Communication) researches and publishes in two related areas. He has worked extensively on both articles and books in the study of new media, most notably *New Media Cultures* (Edward Arnold/Oxford, 2004) and *Web theory* (Routledge, 2003). He is also the leading international researcher on the public personality and is the author of *Celebrity and Power: Fame in*

Contemporary Culture (Minnesota, 1997), the co-author of 'Fame Games: The Production of Celebrity in Australia' (Cambridge, 2000/01), and the editor of the Celebrity Culture Reader (Routledge, 2006). His current research is an extension of these two areas. He is developing the concept of 'intercommunication' as a way to understand the layering of media and communication in an era of transformation from representational media to the more personal dimensions of presentational and social media. This is also leading to an extensive investigation of the online persona, and how that public performance of the self has significant repercussions for the control, security, and mediation of the self. Professor Marshall is also the founder of 'm/c- a journal of media and culture' <[www.media-culture.org.au](http://www.media-culture.org.au)>, one of the premier Internet journals in the field with a readership in over 60 countries.

**Biographical note:** Toija Cinque (PhD Monash University – Media and Communications) is the Course Chair of the Media and Communication program, Media and Communications (Honours) Coordinator and Lecturer in the School of Communication and Creative Arts at Deakin University. Her teaching areas include communications institutions and industries, media texts and audiences, and the new media. She has written widely on internet use, is on the editorial board for *New Scholar: An International Journal of the Creative Arts, Social Sciences and Humanities*, and her forthcoming work is a co-authored book for Oxford University Press entitled *New Media in Everyday Life: Communication, Narrative and Meaning*, Oxford University Press, South Melbourne, ISBN: 9780195572322. Toija Cinque is currently involved in a developing study of the value and implications of the National Broadband Network in rural and regional Australia.

### 3C. Digital natives: children and young adults

chair: Michael Gordon-Smith

**Sora Park:** Access to digital devices and its relationship to digital media literacy

**Leonie Rutherford, Jude Brown & Michael Bittman:** A longitudinal analysis of children's media use and time choices

**Lelia Green, John Hartley, Catharine Lumby & Danielle Brady:** Children's experiences of parents' online mediation

#### Access to digital devices and its relationship to digital media literacy

Among the many dimensions of digital media literacy, this study aims to look at the aspect of 'device literacy'. Digital media literacy can be defined as the ability to access, understand and create content using digital media. It is a multi-dimensional concept consisting of various skills and competency in using digital media. Due to the rapid changes in technological environment, digital media literacy is not generally acquired through formal education systems but within the home or through personal networks of peer groups. This study examines young people's level of device literacy and how each dimension is related to each other.

Technology access, use and skills are essential to communicate in an increasingly networked world. Young people spend a tremendous amount of time and energy online. However, it is not clear how much of that time is spent using technologies that benefit their digital media literacy. Part of the rationale guiding policy initiatives is to provide digital technology access to everyone equally. However, providing access to technologies is not a sufficient condition of acquiring adequate skills. As well as access, both formal and informal education is necessary in order to gain competent levels of digital media literacy. In this study, the relationship between different dimensions of digital media literacy is explored specifically within the dimension of device literacy, with an attempt to explain how access to technologies is related to the use and understanding of content. There have been few studies that empirically examine the process of acquiring the literacies and this study will shed light on how young people experiment with new technologies and eventually develop their digital literacy skills.

**Biographical note:** Sora Park (PhD, Northwestern University) is Associate Professor in Communication and Media Studies at University of Canberra, Australia. Her research focuses on the digital media, media markets and media policy. She has written widely on the economics of television, newspaper markets and other information industries. She is also interested in media user patterns in the digital media environment.

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#### A longitudinal analysis of children's media use and time choices

Marc Prensky's famous 'digital natives' thesis (2001) posits a radical discontinuity between the environment shaped by digital media and older media. In Australia and worldwide broadcasters have shifted to multichannel and multiplatform content strategies. Today's children, therefore, have been born into a 'post-broadcast era', in which TV viewing is understood to have peaked and other claims on children's time and attention compete with older media forms. Media use is often implicated in debates about how young people should use their time for optimal benefit. It is the mandated responsibility of Australia's broadcast regulator to monitor the extent of this media use and community attitudes towards it on a regular basis. Policy makers often wrestle with the question of how time spent in various activities affects children's development. Public health advisors seek to understand how the amount of sleep or physical activity, for example, might contribute to obesity, while educationalists ponder the relationship between the time spent using 'print' and 'video' or game-based media resources for children's learning outcomes. (Howe & Strauss, 2000).

But time use, like monetary expenditure, also provides a way of measuring what families value within different parts of their daily lives, including their media and leisure choices. Most ratings agencies panels, and such national surveys as ACMA's *Families and Electronic Entertainment* (1996) and *Media and Communication in Australian Families* (2007) study aspects of media choices by time of day. But even these large national surveys canvass only a relatively small number of children from each stage in the age range (0-17 years). These

are cross-sectional in nature, a snapshot in time, and are not able to follow a large cohort of individual children as they mature and change their lifestyle investments.

However, since 2004, *The Longitudinal Study of Australian Children* (LSAC) has followed two cohorts of children, one starting from birth (B Cohort), and another from age 4 (K Cohort). Each of these—initially 5000 in each—is surveyed using a range of instruments every 2 years. Four waves of data collection have thus far been assembled. Researchers are now able to analyse the process of maturation of Australian children at a point in history in which digital media practices are being seen to radically transform social life. The LSAC is an ‘omnibus’ survey that was not designed specifically with media practices in mind. However it has some advantages over other data available to media policy analysts. It has robust numbers in a nationally representative sample of children followed from birth to 18 years. It contains a suite of instruments that can deliver precise measurements across a range of areas of developmental significance. In the case of media usage, the time diary, for example, offers more reliable measures of time investments, and where they occur during the day and week for individual children, than most large-scale surveys, as well as some information about the social context of usage. This allows researchers to map patterns of media use and other ‘lifestyle’ choices longitudinally to see how they affect developmental outcomes.

This paper draws on data generated as part of an ARC Linkage Projects Grant, *Digital Natives: Growing up with Old and New Media in Australia*. It offers a progressive story about the developmental stages of children’s media use and lifestyles during a period in which digital platforms are widely seen to be displacing other, older, media practices. It analyses the ‘episodes’ of media usage of Australian children, their durations, occurrences and timing, for each wave of each cohort, and examines the effects of demographic variables such as gender and SES. To offer a contemporary evaluation of the displacement hypothesis, it also looks at patterns of ‘oldest’ media use compared to new, testing whether use (or non-use) or high (versus low use) of particular media establishes patterns of behaviour that continue throughout a child’s life course.

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### **Children’s experiences of parents’ online mediation**

This paper draws on the work of the ‘EU Kids Online’ network funded by the EC (DG Information Society) Safer Internet plus Programme (project code SIP-KEP-321803); see [www.eukidsonline.net](http://www.eukidsonline.net), and addresses Australian children’s online activities in terms of risk, harm and opportunity. In particular, it draws upon data that indicates that Australian children are more likely to encounter online risks – especially around seeing sexual images, bullying, misuse of personal data and exposure to potentially harmful user-generated content – than is the case with their EU counterparts. Rather than only comparing Australian children with their European equivalents, this paper places the risks experienced by Australian children in the context of the mediation and online protection practices adopted by their parents, and asks about the possible ways in which we might understand data that seems to indicate that Australian children’s experiences of online risk and harm differ significantly from the experiences of their Europe-based peers.

In particular, and as an example, this paper sets out to investigate the apparent conundrum through which Australian children appear twice as likely as most European children to have seen sexual images in the past 12 months, but parents are more likely to filter their access to the internet than is the case with most children in the wider EU Kids Online study. Even so, one in four Australian children (25%) believes that what their parents do helps ‘a lot’ to improve their internet experience, and Australian children and their parents are a little less likely to agree about the mediation practices taking place in the family home than is the case in the EU.

The AU Kids Online study was carried out as a result of the ARC Centre of Excellence for Creative Industries and Innovation’s funding of a small scale randomised sample (N = 400) of Australian families with at least one child, aged 9-16, who goes online. The report on *Risks and safety for Australian children on the internet* follows the same format and uses much of the contextual statement around these issues as the ‘county level’ reports produced by the 25 EU nations involved in EU Kids Online, first drafted by Livingstone et al (2010). The entirely new material is the data itself, along with the analysis of that data.

**Biographical notes:** Lelia Green is Professor of Communications at Edith Cowan University and is a co-Chief Investigator with the ARC Centre of Excellence for Creative Industries and Innovation, where she works on the Risk and Representation project. She has been an international collaborator with the EU Kids Online project since 2005.

John Hartley, AM, is Distinguished Professor in the Creative Industries Faculty at Queensland University of Technology.

Professor Catharine Lumby is the Director of the Journalism and Media Research Centre at the University of New South Wales. She is the author and editor of seven books and co-Chief Investigator with the ARC Centre of Excellence for Creative Industries and Innovation at QUT.

Dr Danielle Brady is a Lecturer in the School of Communications and Arts at Edith Cowan University.

## 4A. Globalisation and competition policy

chair: Keith Besgrove

**Patrick Fair & Anne Petterd:** Electronic globalization: the impact on sovereignty

**David Havyatt:** Competition policy for the digital economy

### Electronic globalisation: the impact on sovereignty

#### *Context*

Globalisation has been an economic force throughout the 20th century. In the 21st century, global access to the internet has accelerated globalisation at an increasing pace.

Globalisation poses a challenge to the sovereignty of government. The ability to shop for jurisdictions where regulatory boundaries are low or not enforced, the ability to supply to consumers without maintaining a physical presence and the cost burden facing suppliers who wish to consider and comply with diverse regulatory environments, combine to undermine the relevance of national laws and the ability and desire of global businesses to ensure compliance.

#### *Issues*

How should national governments respond to this loss of sovereignty? What approaches are available to assert control by government? Should thinking change to accommodate the new environment and, if so, what levers are available to achieve public policy objectives?

#### *Background*

The paper will describe the basis for parliamentary sovereignty within a jurisdiction and the means whereby law-making bodies seek to extend their power beyond the boundaries of the jurisdiction.

#### *Investigation*

The paper will investigate how electronic globalisation is impacting government in Australia. The paper will seek to identify areas where sovereignty is being challenged by this phenomenon and examine the regulatory changes that have been made or are under consideration as a result.

#### *Analysis*

The paper will seek to identify themes in terms of the approaches being taken in areas where loss of control due to electronic globalisation has been considered. The paper will also discuss possible alternatives.

The paper will consider issues facing suppliers wishing to conduct online business in multiple regulatory environments. The paper will also examine how those issues might be weighed-up in considering what changes to make to online regulation.

#### *Conclusion*

The paper will attempt to draw conclusions regarding the future impact of electronic globalisation on the Australian economy, the choices available to legislators and make observations regarding the merits of the available options.

**Biographical note:** Patrick Fair is a Principal of Baker & McKenzie. Patrick is a past chairman and current director of the Internet Industry Association and a regular speaker on matters associated with communications and the online environment.

**Biographical note:** Anne Petterd is a Special Counsel at Baker & McKenzie. Anne has expertise in telecommunications, selling products and services across jurisdictions and the processes of government.

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### Competition policy for the digital economy

This paper outlines how the Digital Economy should be envisioned as a transformation of the economy by the General Purpose Technology of ICT (rather than as a subset of transactions that take place within the economy as in Government strategy). Since the 1980s the promotion of competition and the attendant concept of efficiency have been central tenets of public policy. These concepts have been applied increasingly with little understanding of their

significance and meaning. The continuing change to the Digital Economy necessitates a reframing of the policy prescription, especially on policy to focus on facilitating markets as mediums for information exchange rather than marginal cost pricing outcomes.

**Biographical note:** David Havyatt is a widely experienced senior strategy, regulatory and corporate affairs executive. He is currently bringing his thirty years in telecommunications and related industries to bear on areas of policy research as Director, DigEcon Research. David is never short of an opinion, and seldom reluctant from expressing it.

Starting with sixteen years at Telstra in roles covering customer service, corporate sales and strategy his career included stints with Austar and Hutchison, before embarking on a six year engagement in regulatory and corporate affairs at AAPT. More recently he spent two years at Unwired and vividwireless following a short stint with the Department of Broadband, Communications and the Digital Economy.

David holds a Bachelor of Science, a Master of Arts and a Graduate Diploma in Economics. He is a former Board member of the TIO, ACIF (now Communications Alliance) and AMTA, and is a Fellow of the Institute of Company Directors.

## 4B. Convergence: tough and inevitable issues

chair: Andrew Kenyon

**Terry Flew:** National classification scheme review: reforming the framework for convergent media

**Paul Paterson:** What are the real convergent issues? Competition and innovation in a convergent world

### National classification scheme review: reforming the framework for convergent media

On 24 March 2011, Attorney-General Robert McClelland referred the National Classification Scheme (NCS) to the Australian Law Reform Commission (ALRC) and asked it to conduct widespread public consultation across the community and industry. The review is the first of its kind for 20 years, and has been asked to recommend a new framework for media classification in Australia, including regulations relating to online content and digital media applications.

This presentation will provide an overview of the ALRC's proposed model for the NCS, based on the Discussion Paper released in September 2011. It will consider the different elements of the NCS as it has operated in Australia since the 1990s, the limitations of the existing framework in the context of convergent media environments and a globalised digital economy, and principles for reform to guide future development of media content regulation for the purposes of classification. It will discuss the recommendations in the Discussion Paper, that arise out of a consultation process that received almost 2,500 submissions, an extensive social media campaign, and ongoing consultations with relevant industry, government and community stakeholders. It will also discuss the relationship of the ALRC's work to other relevant inquiries, such as the Convergence Review being conducted through the Department of Broadband, Communications and the Digital Economy (DBCDE).

**Biographical note:** Terry Flew is a Commissioner with the Australian Law Reform Commission, heading the National Classification Scheme Review. He is on leave from the Queensland University of Technology, where he is a Professor of Media and Communication in the Creative Industries Faculty. He has been involved with the Communications Policy and Research Forum since the 1990s, and is the author of *New Media: An Introduction* (Oxford, 2008), *Understanding Global Media* (Palgrave, 2007) and *The Creative Industries, Culture and Policy* (Sage, 2012 (forthcoming)).

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### What are the real convergence issues? Competition and innovation in a converged world

This presentation focusses on a significant gap in the Commonwealth Government's Convergence Review. The current focus of the Convergence Review is limited as:

- It looks at the issues through media eyes, with a prime focus on traditional media issues
- It does not address commercial drivers that will determine content, service, customer device, platform and network innovation.

The commercial dynamic between access to content on the one hand, and access to devices, platforms and networks on the other, will be a critical determinant of how the information age unfolds over the next 10-15 years. At present content is, by-and-large, still tied to particular distribution channels or modes, with (arguably) competition-limiting exclusive access to content and unequal access to carriage. However, in a converged world, market, policy and regulatory forces may erode these positions, squeezing out scope for above-normal profits. All for the good for competition - but with significant potential downside for innovation.

Innovation relies on scope to earn above-normal profits when the innovator strikes a winner, at least for a while until overtaken by follow-on ideas, changes in tastes, or regulation. Without an opportunity for at least temporary above-normal profits, innovation is all downside - the innovator bears the losses from the unsuccessful initiatives, but cannot recoup these losses when they get it right.

An important yet currently-unaddressed question is what the converged world might look like from an innovation perspective - how welfare-enhancing innovation might fare under a number of feasible scenarios. If market, policy or regulatory forces push these markets to commodity status, with largely undifferentiated products freely available to all, innovation may be a casualty. Including an innovation perspective in the Convergence Review is necessary to guide policy and regulatory actions that will facilitate, rather than inhibit, the unfolding of a rich and equitable information age in Australia. This is the subject matter of my presentation.

**Biographical note:** Dr. Paul Paterson heads Castalia's global telecommunications practice. He has 20 years of experience in the telecommunications industry - as an economic consultant for the past 7 years, in executive positions in major telecommunications companies for 10 years, and in government. Dr. Paterson has also worked in a number of Commonwealth and State government economic policy agencies, and for the OECD in Paris.

Dr Paterson holds a Bachelor of Agricultural Economics from the University of New England, and Masters and PhD degrees in economics from the Australian National University (ANU). In conjunction with telecommunications consulting, he is currently an Honorary Visiting Fellow in the School of Economics, College of Business and Economics at the ANU. This follows his induction into the College's Distinguished Alumni Hall of Fame in 2004.

#### 4C. Journalism: future challenges and solutions

chair: Franco Papandrea

**Lee Duffield:** Persistent public service media – a new dawn?

**Peter Leonard:** A cause of action for serious invasion of privacy: would it chill free speech in the media?

##### **Persistent public service media – a new dawn?**

This paper addresses the fate of "social responsibility" concepts of media in the context of convergence, diversification and expanded markets. It suggests public service broadcasters, leaders in diversification into new media, may themselves fill society's essential needs for responsible journalism. It says the sector, e.g. ABC, VOA, Deutsche Welle, might adopt more of that role, leaving other media to diversify, expand, contract or compete, much less consequentially for society. The public "broadcasters" can function autonomously, though committed to guidelines; they obtain major funding while avoiding commercial constraints; enjoy stability, affirming histories and social support; and have enhanced their position through becoming new media innovators and implementers. This paper says conscious fostering of such services, as the "social responsibility" core of media, will satisfy most of society's needs. It proposes revisiting literature on public broadcasting, including public perceptions and implied ideology, "programming", audiences, and regulation; to establish the extent of changes already realised. It adopts the perspective of practitioners, seen as creative workers, or media workers committed to professional codes. It maintains a prerogative of professionals in the field, is to take a lead in reordering the way media services are provided.

**Biographical note:** Lee Duffield worked on ABC radio and television news in Brisbane, Perth and Sydney for more than 20 years before beginning his academic career. He was the first news editor on Radio Triple Jay, and was the ABC European Correspondent at the time of the collapse of the Eastern Bloc. He has worked in government media and has been a full-time academic since 1997, currently as a Senior Lecturer in Journalism at the Queensland University of Technology in Brisbane. His research interests include the role of international news media in historical crises; online journalism, and development journalism with a concentration on Papua New Guinea. His 2002 doctoral thesis was on media and the fall of the Berlin Wall, also the subject of a book (*Berlin Wall in the News*, 2009). Other publications include the co-edited *I, Journalist: Coping with and crafting media information in the 21st century*, 2006; and *Europe and the Media*, 2010.

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##### **A cause of action for serious invasion of privacy: would it chill free speech in the media?**

This paper will address the pros and cons of proposals now under consideration for a new privacy law.

**Biographical note:** Peter Leonard heads the Communications, Internet and Media Team at Gilbert + Tobin Lawyers, where he has been a partner since 1989. Peter's practice focus is on commercial and corporate transactions for corporations in the technology and communications sectors. He also has an active practice and extensive experience in communications, internet services and content regulation in Australia and the Asia Pacific region. Peter publishes frequently in his fields of practice. He is a contributing editor of a number of international journals and is Australian chapter editor of World Online Business Law and Colin Long's Global Telecommunications Law and Practice, and co-editor of Communications Law and Policy in Australia. He is active in a number of national and international organisations in the field. He is a past Chair of the Technology Committee of the International Bar Association and a past Vice-Chair of the IBA's Communications Committee.

## 5A. Communications history

chair: Bridget Griffen-Foley

**Peter Putnis:** International communication policy and Australia-US relations, 1920-1950

**Ian Martin:** OTC, a 1960s trend setter for GBE reform

**Adam Dickerson & Cathy Hope:** Communication matters: Whitlam government and the Ministry for the Media (1972-1975)

### International communication policy and Australia-US relations, 1920-1950

Prior to the Second World War, communication between the United States and Australia was constrained by the lack of a direct submarine cable or wireless telegraphy link between the two countries. As a matter of Imperial policy, supported by Australian governments, all traffic between Australia and the U.S. was routed via Britain (the "Eastern" route) or Canada (the "Pacific" route). These arrangements were designed to serve the strategic interests of the British Empire and to protect the commercial interests of British companies, especially Cable and Wireless. In the 1930s, the Australian government repeatedly rejected approaches from the Radio Corporation of America to open up a direct radio-telegraph service between America and Australia, much to the chagrin of U.S. business interests.

Between the Wars, coverage of international news in the Australian press largely emerged out of an 'imperial press system' centred in London. Most U.S. news destined for Australia was actually sourced in London. This 'Imperial preference' in news-flow was facilitated by the telegraph system and by global cartel arrangements amongst international news agencies whereby the London-based agency, Reuters, was given priority access to the Australian news market. U.S. news destined for Australia was routinely channelled via Reuters.

In the 1930s, American diplomats in Australia complained that these arrangements prevented the Australian public from receiving a consistent flow of impartial news about America and that this was damaging U.S.- Australian relations. Pressure was brought to bear on the Australian Government to allow the opening up of a direct telegraphic link between the two countries. But it was finally the outbreak of World War 2 in the Pacific that radically altered Australia's communication orientation. Just a week after the Japanese bombing of Pearl Harbour on 7 December 1941, the U.S. Secretary of State, Cordell Hull, telegraphed Canberra that the establishment of a direct telegraph circuit was 'absolutely imperative'. The Australian government consented three days later and the link was opened on December 26, 1941.

This paper examines communication policy and international news agency history in the context of the development of U.S. - Australia relations from 1920-1950. In so doing, it demonstrates the importance of communication policy and the role of international news agencies in the history of Australia's relations with the U.S.

**Biographical note:** Peter Putnis is Professor of Communication at the University of Canberra. His research focuses on the history of international news networks; he is currently working on the Australian Research Council funded project 'Shaping the National Outlook: Overseas News in the Australian Press 1900-1950'. His recent publications include 'The Early Years of International Telegraphy in Australia: A Critical Assessment' (*Media International Australia*, 2008), 'Share 999: British Government Control of Reuters During World War 1' (*Media History*, 2008); and the edited collection *International Communication and Global News Networks: Historical Perspectives* (Hampton Press, 2011). He is a member of the editorial board of the journal *Media History*.

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### OTC, a 1960s trend setter for GBE reform

Reform of Government Business Enterprises (GBEs) is often dated back to the 1980s and occasionally to the mid 1970s picking up important reforms from the Whitlam era. However, there were significant developments aimed at improving the efficiency of the public sector in the 1960s including the Public Service Act 1960, which embodied many of the recommendations of the Boyer Inquiry, and the Vernon Report of 1965. In the mid 1960s Treasury published several articles which considered inter alia the efficiency of the public sector including 'The Meaning and Measurement of Economic Growth' and 'Investment

Analysis'. The Treasury's view was that the public sector was inherently less efficient than the private sector and it developed a focus through the 1960s on improving the efficiency of resource allocation in public organisations.

The Overseas Telecommunications Commission (OTC) challenged its assumptions on public sector efficiency with its delivery of the COMPAC and SEACOM submarine cable infrastructure in the 1960s. Although OTC had been created in 1946 as a government organisation from parts of two commercial businesses, AWA Pty Ltd and Cable & Wireless Plc, its primary purpose was as a government utility, part of an Empire wide scheme created for security and control, rather than necessarily as a government business enterprise. Moreover, OTC operated as the Australian national body in a commonwealth telecommunications system where investment in international transmission capacity was agreed within the Commonwealth Telecommunications Board which included representatives from major commonwealth nations.

Established as a commission, OTC nevertheless operated in a relatively business-like fashion through the 1950s acquitting itself well, for instance, in anticipating and meeting the huge demand for international traffic associated with the 1956 Melbourne Olympics. By late 1958 OTC had prepared a draft Cabinet submission recommending Australian participation in the Pacific section of a Commonwealth round the world cable scheme. Treasury "had difficulty contemplating a proposal entailing investment of an amount likely to exceed the total value of the Commission's existing assets." It questioned the validity of the traffic and revenue estimates and "found the assumption that there would be 100 per cent stimulation of telephone traffic during the cable's first year of operation as 'staggering'" [Harcourt p. 301].

Ultimately, this scheme became COMPAC, Australia's first submarine telephony cable which connected Sydney with Auckland, Hawaii and Vancouver. Before this project was even commenced SE Asian Commonwealth nations argued for a second cable which would connect SE Asia with Australia and with the COMPAC cable. This proposal also met with initial resistance from Cabinet and Treasury, but was ultimately supported in part based on OTC analysis, and went ahead as SEACOM.

Both COMPAC and SEACOM proved successful in strategic and commercial terms and both this success and the experience of managing the projects helped OTC develop into primarily a commercial operation. This paper traces the development of OTC from the mid 1950s through the planning, analysis, deployment and implementation of COMPAC and SEACOM in the late 1960s. It draws on a financial model of OTC developed by the author to investigate the commission's financial performance and position through this period.

The paper reviews the development of the organisation from a government utility to a commercial enterprise by the late 1960s and compares its development with the key elements of GBE reform that were evident in the 1960s and as a precursor to extensive GBE reforms in the following decades. It draws on a range of reviews of government business enterprises and studies of GBE reform in the 1960s and in later years, and commercial and other records of the Commission from the 1960s held in national archives. Ultimately, it assesses OTC's economic performance in this period against contemporary and evolving expectations of public sector efficiency.

**Biographical note:** Ian Martin is a telecommunications equity analyst at the Royal Bank of Scotland (RBS) and senior research associate at Swinburne University's Institute for Social Research. Ian has been a telecommunications analyst for over 20 years since commencing research in 1988 on the review of Telecom's USOs. He worked on many of the main regulatory and policy issues behind the opening of the sector to competition in the early 1990s. In 1994 Ian joined BZW (later ABN Amro, and later still RBS) as one of the first telecommunications analysts in the Australian capital market where he has worked on the Telstra IPO in 1997, the Optus IPO, the Telstra 2 sell down in 1999 and the Telstra 3 sell down in 2006. In January 2010 Ian commenced a part time position as Senior Research Associate at Swinburne University's Institute for Social Research where he works on the 2010-2012 Australian Research Council funded Discovery Project 'Imperial Designs'.

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**Communication matters: the Whitlam Government and the Ministry for the Media (1972-1975)**

In 1972, Whitlam established the first ever Ministry for the Media. Prior to this date, the various parts of the Federal government concerned with media and communication — such as the Australian Broadcasting Control Board, the Australian Broadcasting Commission, the News and Information Bureau, Film Australia and even government advertising — were divided up amongst various portfolios. Their unification under a single portfolio for the first time embodied Whitlam's idea that 'the media' were not simply a collection of 'channels' for communicating a diverse range of government information, but were themselves a unified and coherent socio-political force — a force important enough to the national interest, and to the Federal Labor government, to deserve its own distinct portfolio.

As the first Minister of the Media, Whitlam appointed NSW Labor man Douglas McClelland, who had served on the 1963 Senate Select Committee on the Encouragement of Australian Productions for Television. McClelland was charged with meeting three interconnected objectives. First, the Ministry was to develop communication initiatives for furthering the production and distribution of a distinctive 'Australian culture', in film, radio, television, and the like. Second, these initiatives were to be further used to generate employment opportunities for Australians in the media industries, which would have the twofold impact of contributing to the economy, whilst also expanding the number and range of active participants in Australian cultural life. Third, as part of the broader Labor 'outlook', the Ministry would help to fulfil the Party's commitment to the democratisation of information and government transparency. These three objectives were intended by Whitlam to be met by a combination of government action (e.g., via the establishment of youth radio Double J, the Australian Government Publishing Service, and so forth) and private media. Hence, Minister McClelland had the extremely difficult task of selling Labor's ideas to the media barons of the day.

In this paper we examine the establishment of the Ministry of the Media, the main achievements of and difficulties for its first minister, and the key industrial and policy problems with which it struggled. It is based primarily on extensive in-depth interviews with Douglas McClelland, and his press secretary, and supplemented by archival and secondary research.

**Biographical note:** Cathy Hope and Adam Dickerson teach at the University of Canberra, in the Faculty of Arts and Design. They have co-authored a number of papers on the history of the Australian film industry, and have a joint research interest in exploring the development of the culture industries in Australia, and the relationships between these industries and cultural/media policies.

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**5A. A companion to the Australian Media**

Information session chair: [Bridget Griffen-Foley](#)

*A Companion to the Australian Media* features over 500 articles, ranging from short factual summaries to substantial essays, on all aspects of press, broadcasting and new media in Australia since the launch of the *Sydney Gazette* in 1803. The volume, featuring over 200 contributors, will be published by Australian Scholarly Publishing in 2014. This session will provide an overview of the project for all delegates interested in this landmark volume, and enable contributors to meet with each other and address questions to the Editor, Bridget Griffen-Foley, and two members of the Editorial Advisory Board, Jock Given and Gail Phillips.

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**5B. Actually using NBN connectivity and bandwidth**

chair: Trevor Barr

**Christopher Pavlovski:** Smart grids, electric vehicles and the NBN**Mandy Salomon:** Sharing more than bandwidth: online collaboration in the era of the NBN**Melissa Gregg & Jason Wilson:** First choice: lessons from the NBN rollout in Willunga**Smart grids, electric vehicles and the NBN**

Smart Grids are a recent initiative by the electricity industry to blend intelligence with the power distribution network, in order to observe electrical behaviour such as voltage, current, and power fluctuations. Existing electrical networks have largely been deployed with minimal remote monitoring and control. This lack of electronic oversight is suggested to contribute to inefficiencies in the distribution and use of electrical power. The Smart Grid involves the deployment of remote intelligent devices throughout the network so that accurate monitoring of the network may take place. A smart grid has the potential to reduce repair time to network outages, improve the use of existing infrastructure, and reduce the carbon footprint of power generation. In particular, given the Australian government's long term target of 60% emission reduction by 2050, carbon reduction is an important consideration. There are several other benefits in deploying a smart grid. This includes support for renewable energy sources at households, facilitating adoption of electrical vehicles, and increase customer awareness of power consumption impacts to the environment. All these factors have the potential to improve the sustainability and liveability of our cities.

The key components of a smart grid involves the deployment of intelligent devices throughout the electrical distribution network, including smart meters to households. The intelligent devices and smart meters gather measurements such as voltage, current and power, together with network events and alarms and communicate this data back to information technology systems that process, store and analyse the information. The enabling technology that supports this interaction is the deployment of telecommunications infrastructure to provide connectivity between devices and information technology systems. Communications infrastructure often has to be deployed prior to implementing the IT systems and intelligent devices, hence this poses an immediate challenge for those electrical distributors who do not have this in place. The current approach to address these communication needs has been through the use of both commercial 3rd party wireless and fixed telecommunication operators, or for the energy distributor to deploy their own infrastructure.

Electric vehicles are an emerging transportation technology which has the potential to reduce greenhouse gas and air pollution. Although electric vehicles may recharge from power that is generated from fossil fuel based generation plants, these vehicles may equally be charged through renewable energy sources such as photo-voltaic panels. In this mode of operation a significant carbon reduction may be achieved. In order to support electric vehicles several enhancements are required to the electricity network. This includes appropriate high-current recharge points at the household and recharging stations throughout the city and urban areas. To support electric vehicles *en mass* a smart grid is required to manage and balance the significant increases in power distribution throughout the network. While smart grids are an essential foundation in supporting electrical vehicles they are dependant upon a suitable communication infrastructure that provides connectivity for monitoring and control of a distribution network supporting renewable energy and electric vehicle recharging. In Australia, the move towards deploying a National Broadband Network provides a unique opportunity to accommodate the communication needs of a Smart Grid that is able to support electric vehicle and renewable energy adoption nationwide. The National Broadband Network<sup>3</sup> is intended to deploy fibre connectivity to households within Australia and such connectivity may be used to also provide a communication channel for metering devices that support electric vehicle charging at households. The NBN may also be used to provide connectivity to commercial premises that provide electric vehicle fast re-charge services across urban and rural areas.

This paper outlines the requirements for addressing electric vehicles and renewable energy by smart grids within the scope of a National Broadband Network. Given the recent government stimulus for both a national broadband network deployment and Smart City

Smart Grid initiatives the opportunity exists to strengthen both programs in a way to support their respective deployment. This unique proposition also supports the policy aims to address carbon reduction within Australia. In this paper we outline how the smart grid is able to support electric vehicles and renewable energy, by outlining how the NBN may be used in these deployments. We focus on the telecommunications infrastructure required to support the metering, recharge, and management of the smart grid and discuss how this infrastructure may be extended to accommodate other forms of energy to further address carbon reduction. We propose a blueprint and architecture, (extending our previous smart grid work) that may be used as a basis for building smart grid solutions that support electric vehicles, renewable energy, and the NBN. It is hoped that the frameworks presented provide a foundation for the development of smart grid standards and telecommunication policies that support electric vehicles and renewable energy adoption in a way that addresses sustainability whilst leveraging the emerging National Broadband Network.

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### **Sharing more than bandwidth: online collaboration in the era of the NBN**

Many service providers are procuring online collaboration tools in the belief that this will afford their organisations greater efficiencies, allowing people to share ideas and knowledge without needing to be physically co-located. Adobe *Connect* and Microsoft *Sharepoint* are being rolled out in the government and education sectors, and Cisco's *Webex* and *Skype* have become everyday tools for enterprise. Immersive 3D technologies add another layer to such offerings by providing online environments for staging events, prototyping and creative interaction. However, there has been little documentation about the amount of bandwidth these collaborative tools require for effective use, and what is needed as the number of concurrent users increase.

This paper anatomises the most widely-used collaborative platforms and looks at the pattern of take-up, with consideration of fixed, wireless and mobile delivery. With a 12 megabit speed being the entry level for NBN's end users, the paper will extrapolate how such platforms would perform, and if users might need to move to much more expensive speed and data plans for effective collaboration. Conversely, the enquiry may determine that the reverse is true - that collaborative platforms need not be bandwidth hungry, adding weight to the Coalition's argument that a high speed internet service ought to be market driven, and that a light weight version of the NBN would suffice.

The case, whichever it be, will be mounted by garnering rich insights from leading technologists, contextualising available data, and from a case study in which Adobe *Connect* is applied to remote classroom learning.

**Biographical note:** Mandy Salomon is a senior researcher with Smart Services CRC, focusing on emergent web practices and their wider implications for the services sector. Mandy's post-graduate studies focussed on informational overload in the digital era. Prior to that, Mandy spent 20 years in professional media practice, working variously as a columnist, presenter, and producer/director across print, television and radio. Mandy's current research focuses on virtual communities, environments and economies. Mandy has shared her research amongst a diverse group of Australian business and NGOs. Internationally she has collaborated with NYU, Yale and Nanyang University, Singapore. Publications in 2010 include 'Why Virtual Goods Matter', *Journal of Virtual Worlds Research* (University of Texas) and the industry white paper 'Immersive Internet Australia' (SSCRC).

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### **First choice: lessons from the NBN rollout in Willunga**

This paper presents results of extensive qualitative and quantitative research conducted in the South Australian town of Willunga, one of the first release sites for the Federal Government's NBN rollout. The research included ethnographic fieldwork, main street interviews and a survey of local residents and school students.

The NBN rollout divided community opinion in Willunga. While there was considerable enthusiasm for the project among the business community, one that is heavily dominated by tourism and retail, other residents were often focussed on the inconvenient aspects of the

rollout, or confused about what the NBN would mean for them. Many in the community felt that they had not been adequately informed about the advantages of the NBN for them, and how they could use it.

This ambivalence in Willunga was present notwithstanding the presence in the community of people using the Internet for commercial and social innovation.

We argue that (a) the difficulties in public communication on the rollout in Willunga holds lessons for policymakers, and (b) better efforts could have been made to highlight the social and cultural benefits of the new infrastructure beyond commercial logics.

Recommendations for future roll-out sites will be offered on the basis of this research.

**5C. Broadband participation and digital literacy**

panel session, co-convended by Swinburne and Melbourne University researchers

**Tom Apperley:** Digital literacy and citizenship in the convergent environment

**Bjorn Nansen, Rowan Wilken, Michael Arnold & Martin Gibbs:** Broadband literacy in NBN-connected homes

**Ellie Rennie & Julian Thomas:** Home Internet in remote indigenous communities

Digital media literacy has been defined as the skills and capabilities needed for effective participation in the digital economy (ACMA, 2009). Australia's Digital Economy: Future Directions (2009) designates 'digital literacy' as one of three elements of a successful digital economy, crucial for the success of the NBN in fostering Australia's digital economy.

Evidence shows that increased levels of basic access to the internet, rapid penetration of digital technologies in Australian households, and widespread migration of commerce and services online have shifted the terms of the debate from access and 'digital divides' to 'participation gaps' and the varied qualities of use based on abilities to use, understand and contribute. This panel will discuss digital literacy and participation gaps in relation to broadband policy. Three distinct studies are producing important insights into these issues, all with direct policy implications. The panel will make connections across these projects whilst outlining major findings to date:

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**Digital literacy and citizenship in the convergent environment**

The first project involves ongoing research conducted with industry stakeholders concerning regulation in the digital economy, particularly in light of the current convergence review. While developing the framework of the convergence review through a process of consultation, the review panel carefully articulated the guiding principle that 'Citizens and organizations should be able to communicate freely' (Emerging Issues paper).

During the course of the project digital citizenship has been demarcated as a central issue for the convergence review by a number of stakeholders. This paper examines how the deliberations on regulatory policy taking place under the convergence review can best align with the goal of digital literacy and concept of 'digital citizenship' to secure Australia's digital future.

**Biographical note:** Dr Tom Apperley is a Research Fellow in the School of Media and Communication at Melbourne University.

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**Broadband literacy in NBN-connected homes**

This presentation will report on findings from a 2010 study of household broadband expectations and adoption in north Hobart (Wilken, Arnold, Nansen); and on interim data from an ongoing study of in Brunswick (Wilken, Arnold, Nansen, Gibbs). Researching these two first release sites of the National Broadband Network, Midway Point and Brunswick, these studies have used a mixture of methods, including surveys, interviews and participant data gathering – a cultural or 'domestic probe' approach – to capture some experience from the NBN's first users.

A key theme emerging from this research spanning a period of anticipation and expectation, and of early appropriation and domestication, concerns digital media and broadband literacy. This paper discusses some problems for digital literacy requirements in NBN-connected homes based upon capacities to understand the many technical and commercial aspects of broadband within the contexts of the public debate about the NBN, as well as the contexts of ongoing change and complexity in internet technology and provision.

**Biographical note:** Bjorn Nansen is a Research Fellow at the McCaughey Centre, Melbourne University.

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**Home Internet in remote indigenous communities**

In 2010-2011 researchers from Swinburne University (Ellie Rennie & Julian Thomas), together with the Centre for Appropriate Technology (Andrew Crouch) and the Central Land Council (Alyson Wright), investigated barriers and needs in relation to home internet in remote Indigenous communities. The ACCAN-funded project worked with three small communities in the central Australia region, where only one household out of thirty had an internet connection and 60% of residents had never used the internet. The research team discovered that residents were not aware of the Australian Broadband Guarantee, which at the time was subsidizing the costs of installation and dishes. Rennie & Thomas will discuss the barriers identified in the report, including the relationship between low take-up, digital literacy and social and geographical proximity to other broadband users.

**Biographical note:** Associate Professor Ellie Rennie is the Deputy Director of the Institute for Social Research, Swinburne University of Technology.

**6A. Prospects for online media, entertainment, apps and music**

chair: Mark Armstrong

**Megan Brownlow:** Entertainment and media outlook 2011-15

**Hamish Fraser:** There's an App for that: the rise and pervasiveness of the App

**Alan Hui:** Access and control in music distribution: locks, lockers, locked out?

**The Outlook for Entertainment & Media in Australia: Reshaping for Consumer Relevance and Engagement**

We are entering a golden age for the digitally empowered consumer. Entertainment and media consumers have never had it so good when it comes to accessing premium content over multiple devices – often for free – or at least at no marginal cost above access. It's an unprecedented situation and an unsustainable one. Business models are changing as a result. The entertainment and media industry is striving to create experiences that engage today's empowered consumer more deeply than ever before. This means redesigning the content experience to be multi-purpose and multi-platform.

Megan's presentation for CPRF11 is drawn from The Australian Entertainment & Media Outlook 2011-2015. It will include:

- five year revenue forecasts for eleven entertainment and media segments
- projections for the three drivers of digital revenues, including smart devices and tablets
- how to unlock the wallet of the digitally empowered consumer
- imperatives for future success for entertainment and media businesses

**Biographical note:** Megan is an Executive Director at PricewaterhouseCoopers and the editor of the annual forecasting publication, *The Entertainment & Media Outlook*. She has over 20 years experience in media ranging from producing *Enough Rope with Andrew Denton* to designing cross-media strategies for online and traditional media properties.

Megan spent eight years with the Nine Network, ecorp and Publishing & Broadcasting Ltd (PBL). Her most recent role was Director of Strategic Integration. In this role Megan helped create cross-platform content and marketing solutions for properties including the Nine Network, ninemsn, ACP magazines, Ticketek and eBay.com.au. Apart from her editor's role, for the *2011 Australian Entertainment & Media Outlook* Megan wrote the chapter on the Internet and produced a special feature on *partnerships*. *The Outlook* receives extensive media coverage and is utilised by industry and the investment community for strategic planning and forecasting. Megan provides private briefings to clients and industry on the health and future of Australia's converging entertainment & media landscape.

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**There's an App for that; the rise and pervasiveness of the App**

Since the iPhone in 2007 and the App Store soon after, the App has become ubiquitous and all conquering across a variety of platforms. Latest estimates have the iTunes App Store alone generating approximately \$3B pa revenue. What is perhaps more surprising is that the App did it without anyone seeing it coming or predicting its rise (and rise).

This paper will explore the rise and pervasiveness of the App to set the stage to explore some of the legal and regulatory challenges that this new market and perhaps ultimate convergence 'device' has created.'

As it is not possible in the time available to review every area into which the App pervades, this paper will consider some of the issues in a little more depth and explore some possible future states.

**Biographical note:** Hamish joined Truman Hoyle in July 2007 and is recognised by leading London-based publication *PLC Global Which Lawyer* as one of Australia's leading practitioners in telecommunications law. In addition to law, he has a degree in engineering and has worked extensively in the communications and technology industries.

Hamish leads Truman Hoyle's Information, Communications and Technology Practice and advises on commercial issues, regulatory matters and dispute work for clients engaged in all

facets of the information, communications and technology industries, including intellectual property protection, licensing and distribution, confidentiality, e-commerce, security, IT procurement and outsourcing.

In addition to his considerable regulatory and commercial skills, Hamish has also acted in significant litigation and mediation matters, including patent, copyright and trademark cases before the Supreme Court and Federal Court.

Prior to joining Truman Hoyle, Hamish was a senior counsel with the Optus Group. He has also acted as a commercial advisor to divisional managing directors at Optus, in various roles.

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### **Access and control in music distribution: Locks, lockers, locked out?**

Digital music locks and cloud-based music lockers emerged as potential game-changers in music distribution at the turn of the last millennium.

Locks promised the extension of copyright control in the digital networked era; lockers promised anytime, anywhere access to content. In the ensuing decade, locks infiltrated almost every music platform and device, but so did unauthorised copies. The pervasiveness of locks was a poor indicator of their future role in music distribution. Not only did locks fail to protect, even with the advantage of pervasiveness; a proprietary web of digital rights management software prevent consumers from enjoying legitimately purchased tracks on the device of their choice.

Amongst the public critics of locks were industry giants, Bill Gates and Steve Jobs. Ultimately, in April 2009, the Big Four music labels' decided to release all tracks on the iTunes store without digital rights management. This was effectively a concession that locks had not lived up to their promise. Arguably, locks not only failed to protect copyright content but damaged the reputations of music distributors and locked them out of potential markets.

Lockers, on the other hand, promised little at their inception, slipping quickly into obscurity after US District Court's ruling against the [My.MP3.com](http://My.MP3.com) locker service. For much of the past decade, peer-to-peer network icons such as Napster, Kazaa, Grokster, LimeWire and BitTorrent stole the limelight as the disruptive force in music distribution. With the introduction of new music locker services from Apple, Google and Amazon, it appears that the disruptive potential of lockers has yet to be tested.

Some online distributors, most notably Walmart, have persisted with locks on digital music. Others, such as Universal and Sony, have experimented with watermarks that allow legitimate files to be distinguished from the illegitimate. These watermarks provide operators of music locker services with the technical means to detect and prevent unauthorised sharing. There is, therefore, a distinct possibility that watermarks will be applied to cloud-based music lockers to restrict access, much in the way that digital locks were applied to online music stores.

This paper explores the implications of applying watermarks to music lockers and questions whether a pro-lock approach, in the context of a new generation of music locker services, can strengthen legitimate music distribution. It uses the recent US litigation between EMI and MP3Tunes.com as a timely opportunity to reconsider copyright issues faced by music locker services. Finally, it argues that watermarks and other music recognition technologies should not be used solely as locks, but as enablers of new services that enrich the music experience.

**Biographical note:** Alan Hui is a legal researcher with interests across a range of copyright and cultural studies issues. His research focuses on the application of copyright and moral rights to music sampling. His primary interests are in the boundaries between authorship, performership and technology, the evolving practices of sampling artists, and the implications for the core copyright concepts such originality, substantiality and the idea-expression dichotomy. A pianist in a former life, Alan studied digital music with Matthew Hindson at the University of Sydney. He is currently a PhD candidate at the College of Law of the Australian National University, under the supervision of ARC Future Fellow Associate Professor Matthew Rimmer.

## 6B. Community and regions

chair: Terry Flew

**Christina Spurgeon, Ellie Rennie & Yat Ming Fung:** Community participation in the development of digital radio

**Julie Freeman:** Framing ICT policies to facilitate participatory e-government

**Joseph di Gregorio:** Regional Australians engaging in the digital economy

### Community participation in the development of digital radio: the Australian experience

Various techno-economic developments put the case for allocating broadcasting spectrum to community-based users under pressure in broadcasting law and policy processes. New and diverse participatory media platforms such as the internet and mobile telephony and spectrum markets that generate windfall returns for governments are two such sources of pressure on public, not-for-profit uses of radio spectrum. Because of their comparatively low barriers to entry, internet-based service delivery platforms in particular have the discursive effect of undermining the 'public interest' case for community access to broadcasting spectrum. They provide leverage for interrogating the 'opportunity costs' of allowing community-based, not-for-profit broadcasting licensees to occupy valuable spectrum. This tension has played out in Australian digital radio policy and services development in ways that do not readily accommodate 'bottom up' approaches to developing new services. This paper looks at how the community broadcasting sector is working within these constraints to secure access to digital radio spectrum for community applications, and why the sector believes there is public benefit in this course of action.

Our research frames community broadcasting as an important actor/network in the development of participatory culture, and as an historically important expression of the institutionalisation of co-creative and collaborative media practice. It is one of a number of important social movements that anticipated and informed development of the participatory affordances of digital networked media. We draw upon scholarly literature on citizen's media, interviews with key figures in the Australian community broadcasting movement, as well as description and analysis of the norms, processes and effects of recent developments in Australian digital radio law and policy. We acknowledge public policy constraints on the empowering possibilities of community-based uses of digital radio for citizen/consumers but argue that the public benefit nonetheless proceeds from retaining structural diversity in the development of the Australian broadcasting system. We outline findings relating to two sets of social benefits.

The first set arises from the fact that community broadcasting remains uniquely placed to facilitate social participation in the design and operation of media institutions themselves, not just their outputs. This is because community broadcasting structures are, in theory at any rate, configured to facilitate bottom-up participation. This persists as a crucial point of differentiation from online social media, commercial print and broadcast media, and public service media. The second set of benefits arise from the convergence of the multi-literacies of social participation that can be enabled and facilitated through community-based and controlled digital broadcasting services. These are not limited to the particular media literacies of the community broadcasting and media movements but also include more generic literacies associated with methods of collaboration and facilitation that are essential to the particular type of participatory media production practices which are described here as 'co-creative'. These have been developing in, and in parallel with community broadcasting, most notably in community arts, open source software and fan community movements, and are widely recognised as new sources and practices of distributed knowledge production and wealth creation, as well as creative expression and social participation.

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### Framing ICT policies to facilitate participatory e-government

This paper examines the role of information and communication technology (ICT) policies in shaping the participatory nature of e-government. It suggests that civic engagement through e-government practices requires a combination of direct and indirect ICT policies. Direct policies support ICT infrastructure development and enhance adoption and use of new technologies. Indirectly, ICTs are used to facilitate broader policy goals such as data

organisation, information dissemination and the provision of spaces for discourse and deliberation. Participatory e-government requires a combination of these types of policies to enable sufficient civic access to ICTs, help citizens develop appropriate skills to use new technologies, provide content citizens can contribute to that is of relevance to their lives, and ensure that civic participation in online political practices will impact decision-making.

Local government areas provide a useful context for participatory e-government, where a combination of direct and indirect policies can be designed and implemented to service locales and citizens. Such an approach requires a symbiotic e-government policy relationship between federal and local government bodies. Federal governments can provide appropriate guidelines to create and implement e-government practices and fund infrastructure improvements. Local knowledge about an area's requirements and citizens' needs can also be utilised by federal governments to offer effective, appropriate and integrated policy approaches to ICT infrastructure and use.

Using examples from Australia and the United Kingdom (UK), this paper highlights the effects of different federal policy approaches on the development of local e-government. Australian local e-government is currently advancing autonomously from federal guidance, with ad hoc ICT applications often implemented without guiding policy documentation. In the UK, the federal government has employed a top-down policy approach with broad contexts and requirements for development that privilege local authorities creating their own online initiatives to suit the specific needs of their citizens and local priorities. A long-term, sustainable approach to participatory e-government development will depend on a cohesive governmental strategy that combines federal and local knowledge, while using policies to support ICTs and using ICTs to support policies.

**Biographical note:** Julie Freeman is a Postdoctoral Research Fellow in the Faculty of Arts and Design at the University of Canberra. Her research interests include e-government, the broader policy contexts of government 2.0, digital democracy, public opinion, and civic participation. Julie received her PhD in Communications from Monash University in 2011, where she taught in the Communications and Media Studies program and received the Dean's Award for Excellence in Teaching. Her thesis entitled 'Local E-Government: Politics and Civic Participation' provided a detailed case study of the impact of political representatives and policy frameworks on e-government development and the provision of online spaces for citizen engagement. In 2009, Julie, together with Brett Hutchins, published an article entitled 'Balancing the Digital Democratic Deficit? E-Government' in *Media International Australia* (no. 130, pp. 17-27).

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### Regional Australian engaging in the digital economy

Several emerging trends within the online activity profiles of internet users in Australia have the potential to significantly change how Australians communicate and interact socially and economically.

This presentation will present the latest ACMA consumer survey data on the use of the internet. Building on research previously published by the ACMA—The internet service market and Australians in the online environment and Australia in the digital economy: Consumer engagement in e-commerce—this presentation will examine specific aspects of the emerging digital economy in regional Australia with reference to regional consumer's engagement in e-commerce relative to other Australians and online behaviours in general.

**Biographical note:** Joseph Di Gregorio has an extensive background in researching and reporting developments relating to convergence and the emerging digital economy. He has worked in a range of agencies including the Australian Bureau of Statistics, where he was part of a small work team responsible for the development of some of the first ICT usage surveys in the OECD. Joseph has also worked in the National Office for the Information (NOIE) and the Department of Communications, Information Technology and the Arts. In both organisations he was responsible for researching and reporting on communications, convergence and digital economy issues and the development of related policy. Joseph has recently managed the production of the ACMA flagship publication, the ACMA

Communications and Media Report. Joseph presently manages one of the ACMA's research teams supporting the ACMA as an evidence-based regulator.

## 6C. Consumer advocacy

ACCAN panel; convenor Teresa Corbin, CEO, ACCAN

**Robin McNaughton:** Consumer decision-making in telecommunications

**Leo Fieldgrass:** The brotherhood of St. Laurence youth advocates project

**Linda Leung:** Mind the gap: refugees and communications technology

### Seeking Straight Answers: Consumer Decision Making in Telecommunications

Understanding consumer decision-making in telecommunications can help us determine what steps to take to facilitate better outcomes for consumers. This is important for three primary reasons. First, there are many indicators that the market is not working for consumers and that they face challenges, detriment, and confusion as they decide what products to buy. Second, communications technologies have become essential utilities, playing a central role in society, and it is therefore crucial that consumers make decisions that work for them. Third, the policy backdrop to consumer protection in telecommunications is currently under scrutiny, and there is opportunity to significantly improve outcomes for consumers. This research sought to investigate: How are consumers navigating the market, specifically in relation to experiences with confusion, information overload, and determining value and risk? How can they fare better?

Recognising the complexity of decision-making, the research comprises 3 components:

- A review of current research in consumer decision-making and analysis of factors identified as specific to the current telecommunications context;
- Qualitative Ethnographic research, using an extended autoethnographic methodology consisting of recorded video diaries, written diaries, and extended interviews to capture the experiences of consumers in the market for a new smartphone;
- Quantitative experimental research, where the effect of a selection of marketing communications tactics on consumers' perceptions and behavioural intentions were tested in a series of 3 online studies.

**Biographical note:** Robin McNaughton is Grants and Research Assistant at the Australian Communications Consumer Action Network (ACCAN), where she helps to manage the innovative consumer research and education projects funded by the ACCAN Grants Scheme, and contributes to new ACCAN research, such as the *Seeking Straight Answers* research. Robin has an international background, and undergraduate qualifications in Communications and Cultural Studies from Concordia University, Montreal.

### Youth Advocates

This presentation will discuss the findings of the "Youth Advocates" project run by the Brotherhood of St Laurence, funded by the ACCAN Grants Scheme from June 2010 to October 2011. The project seeks to address the limited choice in the availability of appropriate and affordable mobile phone services for youth (12-25), especially youth from low income backgrounds, in the context of debt and its impact on young consumers. The project, was conducted with students from the Community VCAL (Victorian Certificate of Applied Learning) program and three other providers. The project comprises of 4 major components: peer research (into vulnerabilities as consumers of mobile phones), a consumer skills workshop series, student advocacy projects (a presentation day to peers and industry stakeholders), and project evaluation (action research).

**Biographical note:** Leo Fieldgrass is a youth worker, educator and policy analyst. His work in the UK and Australia has covered diverse topics, including substance misuse, sexual health, performing arts and consumer rights, whilst always maintaining a central focus on youth empowerment, participation and advocacy.

**Mind the Gap: Refugees and Communications Technology**

This presentation will discuss the findings of the “Mind the Gap” project funded by the ACCAN Grants Scheme from June 2010 to July 2011. The project aims to investigate the lack of knowledge of telecommunications consumption among refugees during their settlement process in Australia, noting that communications serve as lifelines for refugees in the process of flight, displacement and settlement. The project was conducted within the existing i.settle.with.IT project managed by WorkVentures, which provides IT skills form employment through training workshops. Participants were interviewed in person, with interpreters when necessary. Research findings have informed development of a consumer education program to provide newly arrived refugees with a basic knowledge of Australian telecommunications products and services that suit their needs.

**Biographical note:** Dr Linda Leung is a Senior Lecturer at the Institute for Interactive Media & Learning at the University of Technology Sydney. Her research is concerned with how minority groups and marginalised communities appropriate technologies for their needs. She was Chief Investigator and author of the *Mind the Gap: Refugees and communications technology literacy* research project and report, which built upon on an earlier pilot study *Technology's Refuge: the use of technology by asylum seekers and refugees*. Combined, these studies have collected over 100 surveys and interviews about the critical role of technology in the lives of refugees during displacement and re-settlement.

**7A. Community research and regulatory decision making**

ACMA panel; convenor Lesley Osborne

**Matthew Dobson & Rosalie O'Neale:** Keeping up with the kids; the ACMA's cybersafety education

**Suzanne Howard:** Numbering: adding up evidence for change

**Dean Martin:** The evolution of technology and consumer expectations about TV set replacement

**Community perspectives for regulatory decisions**

Recent research which illustrates the integration of community perspectives into the ACMA's regulatory decisions and program development.

The panel comprises three separate presentations of recent community research which has been commissioned to support regulatory review, technical planning and development of educational programs. The research covers topics across the internet, telecommunications and broadcasting and illustrates how the experience and perspective of citizens and consumers is integrated into communications regulation.

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**Keeping up with the kids: the ACMA's cybersafety education**

In designing the ACMA's Cybersmart cybersafety and cybersecurity educational resources it is critical that they are relevant to the target audience of children and young people. In 2011 the ACMA commissioned a qualitative study of children and young people in the 8-17 years age range which sought to understand the changes that have occurred in the use of social networking services and the impact of internet-enabled mobile devices on the range of safety issues that children and young people confront online. The study also addressed new areas of concerns that have emerged since 2009 such as cyberbullying, sexting and the availability of location-based services.

The presentation will outline how the findings of this research will help bring a 'fresh perspective' to future education programs to continue to engage with the ACMA's cybersafety target audience.

**Biographical note:** Matthew Dobson is a senior research analyst in the Digital Society Policy and Research Section of the Australian Communications and Media Authority (ACMA). He has conducted research in the fields of psychology, epidemiology, health economics and health services evaluation and was previously, a senior researcher in the ACMA's predecessor, the Australian Broadcasting Authority.

At the ACMA, Matthew's current research examines children and young people's use of online social networking services.

Matthew has a BA (Hons in Psychology) and a PhD (Epidemiology) from the University of Sydney.

**Biographical note:** Rosalie O'Neale is a Senior Advisor with the ACMA's Cybersmart programs section, which develops and distributes innovative educational activities and programs designed empower Australian children, their parents and teachers to enjoy the benefits of being online whilst staying safe. Rosalie has extensive experience in the regulation of broadcast and internet content at the ACMA (and previously the Australian Broadcasting Authority) including conducting a number of major public inquiries into content issues, and investigation of broadcasting complaints and prohibited content on the internet.

Rosalie recently project managed the development of the ACMA's new Cybersmart website, a major initiative providing a portal to the wide range of ACMA cybersafety resources including mechanisms for reporting illegal online content and behaviour. She also has been integral to the development and implementation of the Cybersmart social media strategy. Rosalie has a long-standing involvement in research into the way Australian families use the internet. This includes the 'Click and Connect: young Australian's use of online social media', released in July 2009, and the research she will present at CPRF 2011.

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**Numbering: adding up the evidence for change**

Telephone numbers are important for telecommunications because they enable people to be connected. Over 2010 and 2011, the ACMA examined a range of aspects of the telephone numbering arrangements via a major consultation with industry and users of telephone numbers. Key assumptions on which existing numbering regulations are based were tested in research with consumers and small- and medium-sized businesses.

The presentation will examine what implications changes in the use of and attitudes towards numbers have for future numbering arrangements and for the policy outcomes that are currently enabled by them.

**Biographical note:** Suzanne Howard is responsible for the ACMA's Numbering Project: an examination of the regulatory arrangements associated with telephone numbers. She is particularly interested in how convergence will impact the delivery of key social policy outcomes and how it will change consumers' expectations of communications. Prior to her current role Suzanne worked in a number of strategic policy roles responsible for sustainability and water policy within the Victorian state government. Suzanne has a Bachelor of Science Degree in Psychology from Monash University and is completing a Masters in Public Policy and Management at the University of Melbourne.

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**The evolution of technology and consumer expectations about TV set replacement**

While the pace of change in broadcast television has historically been relatively slow, digitalisation has seen that household entertainment staple – the television set – move into the age of the internet, computers, and mobile phones. This move, arising from significant developments in recent years in technical standards for broadcasting, has sped up the development of the television platform and sees the introduction of a range of features for television including internet access, content on demand, 3D and ultra HD. The pace of change is reflected in consumer expectations about their television viewing experience with a desire among many consumers to experience these new and enhanced technologies.

Research commissioned by the ACMA in 2011 looked at consumer expectations about the length of time their main television set would last before it needed replacing, which followed research on the age, replacement and adequacy of domestic antenna systems in Bathurst and Orange NSW in 2010 and Penrith, NSW in 2011.

The findings will help inform technical planning for the reassignment of broadcast channels needed as part of the digital dividend, once the analog television signal is switched off in 2013. This work will also inform the deliberations by the sector on the potential and need for future changes to broadcast standards.

**Biographical note:** Dean is a Senior Research Analyst with the Australian Communications and Media Authority in Sydney, where he is responsible for digital television household research, including research on television equipment and domestic antenna systems.

Dean also has a major role in the ACMA's research on Australians' use of digital media and the impact of convergence.

Dean's background is in information management and information technology as well as statistics. He holds an honours degree in English Literature from Victoria University of Wellington.

**7B. Broadband users: types and trends**

chair: Mark Armstrong

**Scott Ewing & Julian Thomas:** The Internet in Australia 2011 – findings from the World Internet Project

**Scott Rickard:** Multimodal Australians: revealing the Australian wireless end user

**The Internet in Australia 2011 – findings from the World Internet Project**

This paper will present findings from our third survey of Australians' internet use non-use. Having undertaken surveys in 2007, 2009 and now 2011 we are able to track Australians' evolving patterns of online choice across a variety of domains including news and information, entertainment uses, communication and consumption and analyse how these patterns of choice are shaping offline activities.

We will present our findings on, amongst other things Australians' attitudes to the National Broadband Network, internet regulation, the relative importance of the internet as a source of news and information and for entertainment and their attitudes to and behaviour towards online retail and the broader digital economy. We will also report on the ways in which Australians are engaging with e-government and e-education.

The Australian partner of the World Internet Project (WIP) is part of the ARC Centre of Excellence in Creative Industries and Innovation. WIP is a collaborative survey-based project looking at the social, political and economic impact of the Internet and other new technologies. Founded by the UCLA Center for the Digital Future in the United States in 1999 (now based at the USC Annenberg Center), the WIP now has over 30 partners in countries and regions all over the world, including Singapore, Italy, China, Japan, Hong Kong, Macao, Korea, Philippines, Sweden, Germany, Great Britain, Spain, Hungary, Canada, Chile and Argentina.

**Biographical note:** Scott Ewing is a Senior Research Fellow at the ARC Centre of Excellence in Creative Industries and Innovation at the Swinburne Institute for Social Research. He has twenty years experience as a social researcher, both at the Swinburne Institute and in the private sector. He is currently managing the Australian component of the World Internet Project, a global survey of internet use and non-use.

**Biographical note:** Julian Thomas is Director of the Institute for Social Research and Professor of Media and Communications at Swinburne University of Technology. His research interests are in new media, information policy and the history of communications technologies.

Julian is an Associate Editor of the website Australian Policy Online. His book on the history of intellectual property law, co-authored with Megan Richardson, will be published in 2011 by Cambridge UP. He is also a board member of the Foundation for Public Interest Journalism, a member of the Consumer Consultative Forum of the Australian Media and Communications Authority, and Convenor of the Swinburne University node of the Australian Research Council Centre of Excellence in Creative Industries and Innovation (CCI).

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**Multimodal Australians: revealing the Australian wireless end user**

For the everyday consumer there is a general trend away from fixed only usage and towards wireless connectivity. The take-up of mobile Internet enabled devices such as smart phones, tablets, and computers, and the decrease in fixed services such as landline phones in the home, is part of an emerging trend which has been building over the last decade not only in Australia but also globally. In June 2010, the Australian Bureau of Statistics reported that 'Mobile wireless (excluding mobile handset connections) was the fastest growing technology in internet access, increasing to 3.5 million in June 2010. This represents a 21.7% increase from December 2009'.

Only limited research has been undertaken into user experiences with wireless broadband. This project investigates the ways in which Australian end users are adopting wireless broadband for individual use. The study is based on end user perspectives and explores the

possibility that Australians are moving towards a sense of multimodal connectedness by using an increasing number of devices and forms of connectivity, in particular wireless, in order to do so. Wireless Internet connectivity for many Australian end users takes the form of Mobile Broadband, Mobile Internet and Wi-Fi.

Investigating the adoption practice of wireless broadband by Australians has revealed the presence of six different connector groups each with some unique characteristics. The Single Connectors are: Mobile Broadband, Mobile Internet, and Wi-Fi; the Twin Connectors of Mobile Internet + Wi-Fi, and Mobile Broadband + Wi-Fi; and the Triple Connectors, those who use all three forms of wireless broadband. The differences between the connector groups reflect the diversity of practice of each connector group, but at the same time the connector groups leave you with an awareness of multimodal connectedness that is occurring among Australian users.

**Biographical note:** Scott Rickard is currently employed as a Senior Researcher at the Smart Services CRC, Swinburne University of Technology. Over the last two years she has been investigating from a social perspective Australian end-users in relation to their adoption of wireless broadband.

She has previously held industry positions in public relations and multimedia, and academic teaching positions in media and communications.

Scott has a MA from Swinburne University of Technology, and is completing a PhD at the National Centre for Australian Studies, Monash University.

## 7C. Using Internet for social and health innovation

chair: Reg Coutts

**Robert Morsillo:** Using the Internet for productive social innovation in Victoria

**Simon von Saldern:** Online Arthritis map of Victoria

### Using the Internet for productive social innovation in Victoria

This paper assesses some of the key characteristics of the relationship between social innovation and the internet. It is based on a study of several non-government organisations, who, as part of their business operation, have recently implemented Web 2.0 solutions utilising resources arising out of the Victorian Government Innovation Statement (2008). While these “collaborative internet innovation” projects were primarily intended to increase organisational productivity and economic activity, what makes them particularly interesting is their direct *social* innovation purpose using internet based communications technologies.

There is an increasing interest in the concept and practice of social innovation (cf. Mulgan, 2007), which is occurring even while its precise definition is debated (cf. Pol & Ville, 2009). Such debates occur along a number of axes including: social innovation versus business innovation; social purpose versus business purpose; innovation by non-profit organisations versus for-profit organisations; and incremental innovation versus disruptive innovation. This last axis, in particular, locates social innovation within Christensen’s “disruptive technology” framework (Christensen, 1997). A social innovation that has a certain defined set of characteristics is classified as a “catalytic innovation”, which produces “sustainable social change” (Christensen, Baumann, Ruggles, & Sadtler, 2006).

This paper locates social innovation within the field of innovation generally and its role in the Australian economy, something which does not yet appear to be recognised (cf. Cutler, 2008; DIISR, 2009). Further, the roles of the internet and future high capacity broadband services in enabling social innovation also do not yet seem to be recognised (cf. DBCDE, 2011) despite the Australian Government’s own Productivity Commission recently asserting that: “Social innovation is critical to achieving better outcomes from public funds spent on human services...” (2010, p. 243). Utilising actual case studies, the paper will argue that public policy for innovation and the digital economy needs to look beyond the narrow confines of “productivity” in order to capture the full range of benefits available from productive social innovation using the internet.

**Biographical note:** Robert Morsillo is Group Manager Consumer Affairs at Telstra Corporation Ltd. He has an interest in user innovation in telecommunications, for example, “Indigenous culture and communications: Can stakeholders build a better telephone service?”, *TJA* May 2008, and with others, “Fixed and mobile innovation through user representation: Two case studies”, *TJA* Feb 2010.

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### Online Arthritis map of Victoria

In 2010 Arthritis Victoria (AV) conducted a consumer research project across Victoria to identify the key issues affecting people with arthritis or other musculoskeletal conditions. The Primary Care Research Unit at Monash University was engaged to undertake thematic analysis of the survey data.

Two strong issues that emerged from this research were:

1. People with arthritis and other musculoskeletal conditions have difficulty navigating the maze of health, disability and social services required for effective management of their condition(s).
2. People with arthritis and musculoskeletal conditions living in rural areas of Victoria experience difficulty gaining timely access to appropriate health professionals, particularly rheumatologists.

On recognition of these issues, AV started work on the development of a model that could help address these issues. The concept of an online mapping tool that could display data on relevant health, disability and social services to enhance consumer self-management and

primary/secondary prevention was seen as an appropriate solution to help address the issues. In addition, data on the prevalence of arthritis and osteoporosis across local government areas (LGAs) to highlight areas of service inequity would provide AV and other relevant organisations with valuable information for future service delivery planning.

In early 2010, Arthritis Victoria was successful in securing funding from the Ian Potter Foundation to embark on the development of the 'Arthritis Map of Victoria' project. An online map developer was engaged, and the project team began working on collecting and collating relevant data to be included on the map. The choice of map developer enabled the map to be built on the Google Maps platform.

The Arthritis Map of Victoria was officially launched on the 29<sup>th</sup> March 2011 by the Victorian Minister for Health and Minister for Ageing, Hon David Davis during Arthritis Awareness Week 2011.

Two versions of the map are available. The *Consumer/ Health Professional Map* features information on the location of health services, physical activity programs, accessible public facilities, local support groups, as well as prevalence data on MSK conditions per local government area (LGA).

In addition to the above elements, the *Health Planning Map* features projected population rates per LGA, urban growth boundaries, socioeconomic indexes per LGA and hospital utilisation data to assist researchers and policy makers plan future health services.

In summary, the Arthritis Map of Victoria is a practical, interactive online tool that aims to help address the increasing impact of arthritis and other musculoskeletal (MSK) conditions in communities across the state of Victoria. The Arthritis Map will assist people living in Victoria prevent or manage chronic MSK conditions by helping them to locate the programs and services they need. It will also be a very useful tool for others working in the area of chronic disease prevention and management.

**Biographical note:** Simon von Saldern is the General Manager of Development and Business Services at Arthritis Victoria. Originally trained in Public Relations at Deakin University, Simon has worked extensively in the Not for Profit and Tourism sectors over the past 20 years with a sound history in fundraising, membership and business growth.

In his time in the tourism sector Simon was responsible for successfully obtaining access to the State Insurance Authority (VMIA) for over 700 small to medium sized businesses and for capitalising a start up accommodation venture to \$12mill in fourteen months.

Simon is currently studying his MBA (Executive) at RMIT.