

researchacma
Evidence
that informs

Evidence-informed regulatory practice—an adaptive response, 2005–15

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regulating

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Executive summary

The Australian Communications and Media Authority (the ACMA) was created in 2005 as a converged regulator to regulate the four sectors of telecommunications, broadcasting, radiocommunications and the internet. Since its formation, the ACMA has strived to be an evidence-informed regulator, using research in an environment of ongoing change to document and build evidence, inform public debate about regulation and build capability among our stakeholders to make communications and media work in Australia's public interest.

Convergence has not proved to be a stable concept, either in terms of market and technology developments, or as reflected within the regulatory system. Each of the four media and communications sectors are subject to industry-specific non-converged legislation. Research and analysis has helped the ACMA to understand the issues specific to each of the four sectors, identify issues common across sectors and platforms, and regulate legacy environments while addressing contemporary communications and media concerns.

This paper reflects on the ACMA's regulatory practice over the past 10 years; in particular, the role of research in evidence-informed decision-making and regulation (see Figure 1). The discussion will explore the ACMA's use of research to:

- > understand and document the pressures for change in the wider environment and the implications of these change pressures on regulatory frameworks
- > accommodate change within existing regulatory structures, which the ACMA has done by assessing the need for any regulatory intervention against enduring public interest concepts
- > build the capability of citizens and industry to engage effectively with digital communications and media by facilitating access to public resources and providing information to assist citizens in the changing environment
- > engage with the public and industry in adapting and designing regulatory and non-regulatory responses that both respond to, and accommodate, change in the industry and user environment.

Evidence gathered through the use of a variety of research methodologies has assisted the ACMA's analysis and framing of responses to convergence pressures on regulatory settings. Research techniques also continue to help dissect specific regulatory problems, providing definition and scope to assess the changing nature of benefits and risks. Research has also been applied to the quantification of costs and benefits of regulatory and non-regulatory interventions.

Inherently, this approach is adaptive, as evidence documents the effects of change in the dynamic media and communications environment. This approach is also illustrated through a case study looking at how this evidence-informed approach has been applied to the development of a reform approach for industry code revisions and telephone numbering.

About the research

research**acma**

Our research program—research**acma**—underpins the ACMA's work and decisions. It contributes to the ACMA's strategic policy development, regulatory reviews and investigations as the ACMA seeks to deliver on its strategic intent of making media and communications work for all Australians.

This research is drawn from research**acma**'s five broad areas of interest:

- > market developments
- > media content and culture
- > social and economic participation
- > citizen and consumer safeguards
- > regulatory best practice and development.

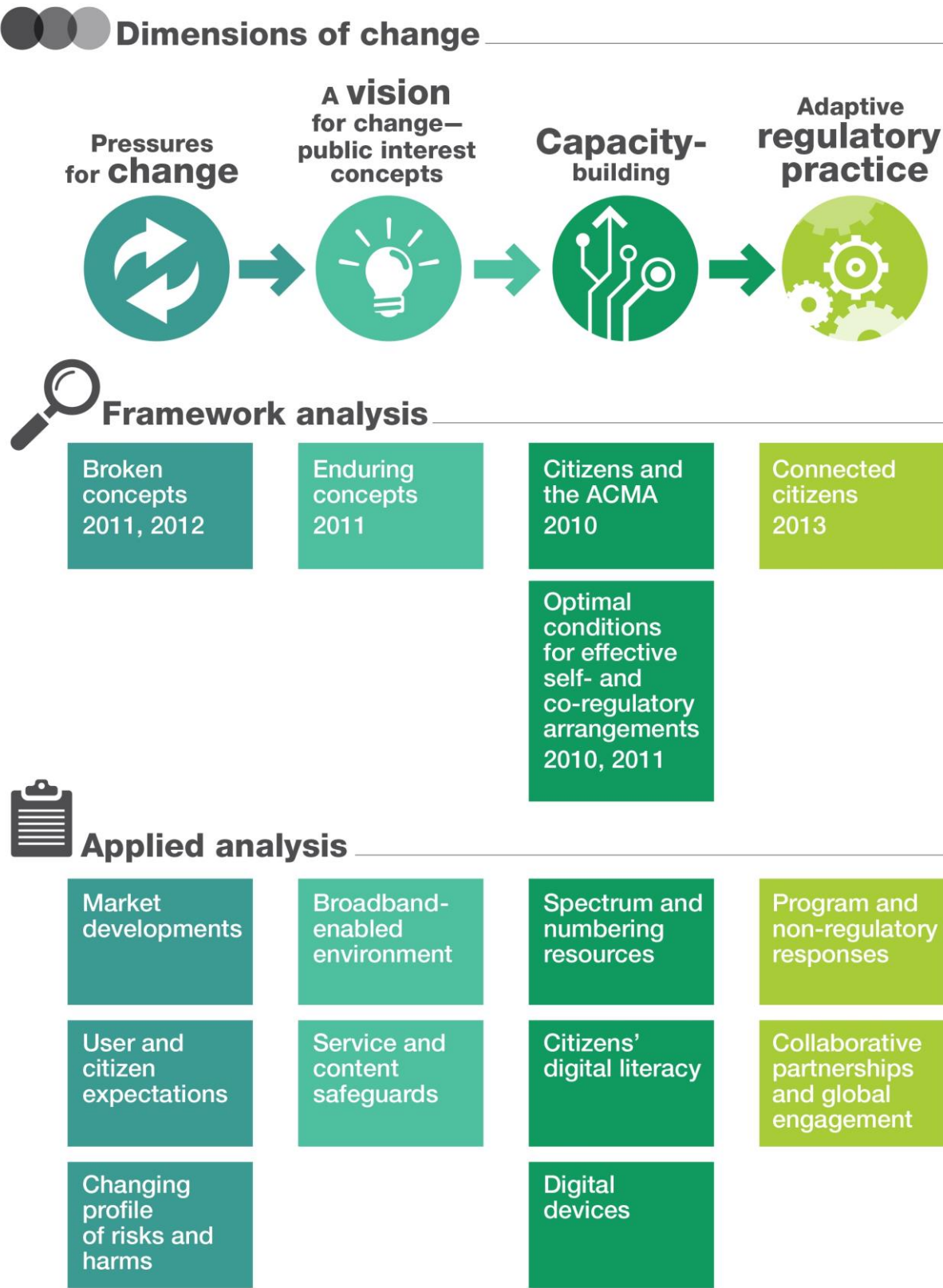
This paper examines the use of research as a tool of evidence-gathering to inform regulatory practice. It looks at how the ACMA has used research in an environment of ongoing change to document and build evidence, inform public debate about regulation and build capability among those most affected by regulatory activities.

The following discussion will explore the use of research within an architecture that defines four elements to guide an adaptive response to change as it occurs in a regulated industry environment:

- > understanding the pressures for change
- > accommodating and creating a vision for regulatory change
- > building a capability for effective engagement with digital communications and media among regulated entities and citizens
- > engaging in adaption—in this case, the design of regulatory and non-regulatory responses.

In each of these areas, the ACMA has used a variety of research methods to develop a body of evidence and analysis about the efficiency and effectiveness of regulatory settings and tools, and the operation of specific parts of communications and media regulation.

Figure 1 Overview of evidence in ACMA regulatory practice





Pressures for change

Characteristic of the communications and media environment over the past 10 years have been the impacts of digitalisation of services and content, and the enhanced capacity of the internet and high-speed broadband to host first physical and then social networks.

In documenting the scope and impact of these changes in the industry and citizen environment, the ACMA has used a variety of research methods to identify where pressures on regulatory frameworks are occurring and where regulatory practice might change to facilitate new services, applications or allocation of public resources. The ACMA has done this in two ways:

- > undertaking a systematic review of the concepts underlying regulation and how they have been affected by environmental pressures
- > documenting ongoing changes occurring in the media and communications environment, by creating and cataloguing evidence with a specific focus on the impact of change on:
 - > market developments
 - > changing citizen and user expectations
 - > changing profile of benefits and risks
 - > international regulatory structures and perspectives.

Framework analysis



Broken concepts (2011 and 2013 update)

The growing structural strains in the communications and media regulatory space were documented in the paper *Broken concepts—the Australian communications legislative landscape*, originally published in August 2011 and updated in June 2013.

The paper provides an overview of the current suite of communications and media legislation and its incremental updates over the past 15 years. It analyses the key building blocks of the core legislation to assess how they are affected by these change pressures. It concluded that many of the current concepts in legislation were coming under strain and some concepts were already redundant, implicitly arguing for a change in frameworks to recognise the different structures of IP-delivered communications and content.

This analysis has proved useful in its application to the contemporary deregulatory policy environment. It has identified potentially redundant regulatory concepts, as well as identifying relevant inter-linkages between many of the concepts in legislation. Understanding these inter-linkages is important when there are proposals to amend or repeal particular pieces of legislation or regulation. For example, one of the risks of repealing or amending legislation in isolation may be orphaning or rendering ineffective remaining legislation that relies on a common core concept for its operation.

Applied analysis



Scope and impact of change

Over the past 10 years, communications and media have undergone a period of significant innovation, along with disruption to existing business models and industry structures. These changes have been documented through tracking market structures and technology developments, and longitudinal studies of Australians' changing media and communications practices. The rise of high-speed broadband and mobile devices has generated growth in over-the-top (OTT) services, and has enabled communications and media users to access new content and participate in content creation. It has also engendered a changing profile of individual and sector-wide benefits and risks.

Market developments

The ACMA's [communications report](#) is Australia's only independent and comprehensive annual market update on the performance of telecommunications carriers and carriage service providers (CSPs) in meeting regulatory obligations, with specific reference to consumer satisfaction, consumer benefits and quality of service. Information about the broadcasting industry's performance in meeting regulatory obligations is also included in this report, reflecting the converged communications and media sector.

Australia is undergoing a transition to online and internet-protocol (IP) service delivery models, which affects the communication and media sectors that the ACMA regulates. These developments continue to provide strong evidence of the growing scale of the digitisation of the economy in Australia and the ongoing challenges this brings to traditional communications and broadcasting regulation, such as fixed-voice consumer safeguards, online protections and the representation of Australian content in new online delivery channels.

Relevant tracking reports include:

Communications report series, 2005–14 (including telecommunications service availability reports [2004–05](#), [2005–06](#), [2006–07 to 2007–08](#), [Telecommunications today research report series](#) and [researchacma snapshot series 2013, 2014](#)).

- > [Commercial television industry financial trends 1978–79 to 2005–06](#) (May 2008).

Other ongoing areas of research focus have included the rise of mobile and IP-enabled communications and content, Australians' growing adoption of OTT voice and content services and the related implications for regulation framed in a pre-internet era. This work has built a body of evidence to inform regulatory policy reviews and the ACMA's assessment of where facilitation—including the selective application of forbearance—has been necessary to accommodate innovative services, applications and content in the Australian market.

In this stream of research, publications include:

- > [Survey of the community radio broadcasting sector 2002–03](#) (August 2005)
The report provided a baseline overview of the Australian community radio sector.
- > [The Australian VoIP market](#) (December 2007)
While research found a relatively limited take-up of voice over internet protocol (VoIP) among consumer respondents over 18 years of age and small-to-medium enterprises in 2007, it also found an already high level of awareness and interest in taking up VoIP in the future.

> **[Creating new markets—broadband adoption and economic benefits on the Yorke Peninsula](#)** (June 2008)

There was limited information in Australia about the regional impacts of broadband services. This study, funded by the ACMA, identified important success factors in broadband adoption.

> **[Fixed-mobile convergence and fixed-mobile substitution in Australia](#)** (July 2008)

This supply-side research found that fixed-mobile convergence services were less developed in Australia than they were internationally. 'Mobile-only' fixed mobile substitution plans were only being offered by the smaller mobile operators. However, continued developments were expected to have an important influence on the communications sector in the longer-term.

> **[Changes in the Australian VoIP market](#)** (December 2009)

By 2009, the Australian VoIP market had expanded in the number of providers offering services, with consumers showing a growing interest in VoIP services.

> **[IPTV and internet video delivery models—video content services over IP in Australia](#)** (June 2010)

The content delivery environment in Australia was undergoing rapid change as greater amounts of content became available through new devices and platforms, including the digital terrestrial platform. By 2010, content rights-holders were experimenting with online delivery and internet service providers (ISPs) were increasingly offering new content services.

> **[Emerging business models in the digital economy—the mobile applications market](#)** (May 2011)

Mobile applications were a new area of activity in the Australian communications market. This study looked at market developments and the issues faced by consumers in their growing use of mobile applications.

> **[Emerging issues in media and communications](#)** (May/June 2013)

This series of four occasional papers examined emerging issues in media and communications.

> **[Mobile apps](#)**

In this updated look at mobile apps, the development of the one device, one platform environment was bringing together a number of previously distinct sectors—telecommunications, radiocommunications, broadcasting, computing, publishing and financial services. These developments pose challenges to traditional approaches to regulation where apps are not reflected in existing legislative or regulatory concepts.

> **[Near-field communications](#)**

Electronic mobile payments were found to be taking off, with Australians increasingly using smartphones and apps for near-field communications. However, there were emerging concerns about sharing personal information, and challenges for user protections.

> **[Cloud computing](#)**

Conditions for the wider business and consumer adoption of cloud computing were present in the Australian market. However, the characteristics of cloud computing raised challenges for traditional regulatory models that had treated infrastructure, services and content separately.

> **Privacy and digital data protection**

The paper highlighted that fewer than 40 per cent of Australians were confident that website privacy settings protected their digital information. In a growing information economy, some newer digital data practices were leading to a range of privacy-related issues—these were testing the scope of existing communications and media privacy protections, and underscoring the need for issues to be addressed within a single coherent regulatory framework.

> **Six emerging trends in media & communications** (November 2014)

Australians are combining different networks, services and devices to communicate anywhere, anyhow and anytime. The six trends identified in this paper have long-term implications for the regulation of the sector and include: over the top communications; consumers build their own networks, wearable devices, flexible television, multi-screening and changing consumption of news sources.

Changing user and citizen expectations

The ACMA has legislative responsibilities to provide advice on matters affecting consumers of communications services and to conduct research into community attitudes to programming and content service issues.

The ACMA has explored longer term changes in media and communications consumption, and associated expectations of technologies and content, through a series of longitudinal studies of Australian families and children's media and communications use. Television viewing has remained relatively stable over the past 10 years, in terms of hours of television viewed. However, there have been ongoing changes in viewing patterns by different age groups, with internet-delivered content, use of tablets and the multi-screen viewing environment an increasing component of Australians' viewing habits.

Consistent with market trends towards digitalisation of communications and content, ACMA research has also examined Australians' deepening engagement with e-commerce, their growing digital data footprint and their use of location apps. Consumer confidence in protections for internet-enabled and OTT services has been identified as one of the barriers to the wider take-up and adoption of new services and apps.

In this stream of research, publications include:

> **Media and communications in Australian families** (December 2007)

This 2007 study updated 1995 research examining technology use by young people. Internet, email, instant messaging, chat rooms, video-sharing, mobile phones and portable music players—available in 2007, were barely present in the home of 1995, if at all. But many of the services that were available in 1995—television, radio and video games—remained central to families' media use.

> **Use of electronic media and communications—early childhood to teenage years** (June 2009)

The research demonstrated how patterns of electronic media and use of communications changed as children moved from early childhood to teenage years. The one constant was television, with the same average participation of 94 per cent for children and young people across all age groups.

> **Digital Australians—expectations about media content in a converging media environment** (October 2011)

Australia's transition to online media, and the community expectations attached to media content, were the subject of this community research. It found that access to online media brought with it greater choice, personalisation and convenience, but for some users, there were challenges to feel confident and safe online.

- > [Australia in the digital economy—consumer engagement with e-commerce](#) (November 2010)

The research found widespread participation by Australians in aspects of the digital economy, with 88 per cent of household internet users having performed one or more e-commerce activities in the previous six months. Banking transactions, purchasing goods or services and paying bills online were the most popular e-commerce activities.

- > [Here, there and everywhere—consumer behavior and location services](#) (December 2012)

Location services were newly available in the Australian market. This study looked at Australians attitudes to the use of location services and emerging regulatory issues related to issues of consent, privacy and digital information management.

- > [Digital footprints and digital identities—community attitudinal research](#) (November 2013)

Most Australians have multiple digital identities, managing between five and 50 login and password combinations to conduct their day-to-day online activities. Participants in this research revealed that Australians adopt three different types of online identities to manage their online experience—a transactional identity, a social identity and a professional identity.

- > [Australians' digital lives](#) (March 2015)

Australians are strongly embracing the digital life, with more than nine in 10 (92 per cent) of adult Australians using the internet. However the way Australians access the internet is changing—70 per cent go online with a mobile phone and 50 per cent with a tablet. While the home is still the preferred place to connect to the internet, alternative locations such as the workplace, wireless hotspots or a friend's place are increasingly used. The level of digital engagement is also intensifying as people download increasing amounts of data, actively embrace cloud services for data storage, and connect as digital workers and digital consumers.

A changing profile of benefits and risks

The growth of online activity has brought with it many benefits and different issues of concern for citizens. Research has explored the shift to virtualised, software-driven risks and scams in the online environment, and tracked the changing industry response to these concerns.

In this stream of research, publications include:

- > [Attitudes towards use of personal information online](#) (August 2009)

The research found that the decision to disclose personal information was based on an assessment of the benefits versus the inherent risks. Australians were learning about protecting their personal information in largely informal ways.

- > [Online risk and safety in the digital economy](#) (February 2010)

The research found that online usage and risk behaviours crossed national and age boundaries—safety, security and privacy issues had the potential both to be global issues and to be relevant across all generations. There was a trend towards international cooperative approaches to address issues arising from global online content and communications.

- > [Community research on informed consent](#) (March 2011)

Research found that, from a consumer's perspective, the 'core principle' of informed consent is that full information must be offered in an accessible manner, at the time of agreement.



Enduring public interest concepts

The ACMA is the independent statutory authority given the task by the Parliament of ensuring that media and communications regulation, standards and industry codes of practice operate effectively and efficiently, and in the public interest.

Australian regulatory practice, as expressed in the [Australian Government Guide to Regulation](#), also requires that regulation should be imposed only when it can be shown to offer an overall net benefit. In the communications and media context, any assessment of net benefit needs to identify the relevant public interest that endures irrespective of changing technology, market structures or changing citizen use and expectations.

The notion of the ‘public interest’ is a key organising principle for the agency in forming and communicating a vision to meet the pressures for change within the communications and media sectors.

Research has assisted in analysing and identifying those enduring public interest concepts that continue to inform the basis for regulatory interventions in media and communications. For specific forms of regulation, research has also provided evidence to inform the ACMA’s assessment of whether particular interventions are no longer required or where they require updating to remain efficient and effective.

Framework analysis



Enduring concepts in communications and media in Australia

As a counterpart to the *Broken concepts* work, the ACMA subsequently published (in November 2011) a companion piece of work identifying a number of enduring concepts that it believes will usefully play into ongoing development of regulatory responses to the development of the broadband-enabled ‘networked society’. [Enduring concepts—communications and media in Australia](#) considered:

- > the fundamental concepts that underlie the rationale for present and future intervention in media and communications markets (‘enduring concepts’) or the public interest matters that shape the reasons for a regulator intervening in markets and society
- > how these concepts may be applied in a converged media and communications framework.

The paper identifies the concepts that have been prominent in past policy thinking. It also identifies several new ‘convergence concepts’—that is, concepts that have been observed to coalesce around, or be accentuated by, the changes brought by media and communications convergence, and which have not been hitherto articulated. These pressures often requires concepts from existing frameworks to be recast, or the methods to achieve them re-evaluated to accommodate contemporary realities.

From this analysis, some 16 concepts were identified and organised into the following broad groupings.

Market standards

1. **Competition.** Media and communications markets should be competitive to encourage innovation, excellent customer service and diversity of choice. Regulatory settings should reflect the desirability of competitive neutrality across platforms and among market participants.
2. **Quality.** Regulation should support access by Australians to a broad range of quality media and communications services that are commensurate in kind and quality with the demands of consumers. It should promote a range of quality choices, including the best available communications and media services.
3. **Redress.** The public is entitled to have confidence in media and communications safeguards that should appropriately reflect community standards and norms for consumer transactions. These safeguards should also provide users with effective and accessible avenues of complaint and redress if standards are not met.
4. **Efficiency.** Media and communications markets should be supported by policy settings and interventions that are coherent, appropriately calibrated and predictable so that services are provided—and public resources are used—efficiently over time.

Social and economic participation

5. **Access.** Citizens should enjoy reasonable and equitable access to the media and communications infrastructure, services and content necessary to promote their effective participation in society and the economy. Rights-holders should enjoy **reasonable and equitable access** to media and communications infrastructure to deliver communications services and content, and should be able to secure appropriate return on their intellectual property.
6. **Confidence.** Media and communications policy settings should be coherent, appropriately calibrated and predictable so that all parties are empowered to understand and exercise their rights and responsibilities. Responsibility for media and communications outcomes should be shared between government, industry participants and users.
7. **Digital citizenship.** Citizens and businesses should have the necessary technical proficiency and digital literacy to enable them to engage meaningfully and successfully with and through available communications and media services.

Cultural values

8. **Diversity of voices.** There should be a diversity of perspectives expressed in the public sphere to promote pluralism and sustain a vibrant and healthy democracy.
9. **Australian identity.** Australians should be able to experience Australian voices and stories when using or consuming media and communications services.
10. **Community values.** Delivery of media and communications services and content should reflect community standards.
11. **Localism.** Citizens should have access to media and communications services that are relevant to them and enable them to participate in their local community.
12. **Ethical standards.** Information-reporting should be fair, accurate and transparent so that citizens may participate constructively in Australian democratic processes.

Safeguards

13. **Protection of the public.** Australians should be appropriately protected from harm when using media and communications, and Australians should have access to emergency services to protect life, health and safety of individuals and communities.
14. **Protection of children.** Children in particular should be protected from content or communications that are age-inappropriate or harmful to them.
15. **Digital information management.** The treatment of data by media and communications network operators, service providers and other rights-holders should respect user preferences, relevant privacy legislation and applicable community standards.
16. **National interest.** Media and communications settings should reflect the national interest. This includes protecting Australia's interests domestically and promoting Australia's interests internationally through multilateral processes.

The analysis also examined how these concepts could be applied in a converged IP-network layered environment. It considered whether the forms of intervention would be implemented by government and industry operators, or whether interventions are best made by individual citizens to effectively deal with digital content-related matters.

Applied analysis



The *Enduring concepts* analysis is a useful starting point for any review of existing forms of intervention or where new forms of intervention are contemplated. It provides a framework to assess whether there are more efficient and less prescriptive means to deliver a particular public interest objective.

Broadband-enabled environment

Research has documented the evolution of Australia's broadband-enabled environment with a particular focus on developments in technologies, services and applications. Analysis examined the implications of these developments for confidence in existing regulatory settings, the effect of these developments on the efficiency of existing interventions and their implications for enduring concepts like market competition, efficiency of resource allocation and quality standards.

One of the regulatory decisions in accommodating change in the environment also includes the explicit decision to refrain from doing anything—or forbearance—even where regulatory action is available. An overview of broadband-enabled developments offers a deeper perspective on the significance of developments, including where future intervention may be needed to accommodate service growth, as well as the perspective that it may be inefficient or inappropriate to intervene in the market for every new development.

Related research on broadband developments and their intersection with regulatory settings include:

- > [Understanding your internet quality of service](#) (February 2006)
Research found that internet performance as measured by six key parameters was consistent with the inherent variability and technical limitations of internet technology at the time.
- > [IPTV and internet video in Australia](#) (May 2008)
In 2008 the Australian IPTV and internet video market was less developed than many other markets internationally. The research identified that Australia's broadband market structure at the time was seen as a barrier to further IPTV and internet video deployment.

> [Top six trends in communications and media technologies, applications and services](#) (May 2008)

Trends identified by the ACMA were:

- > an accelerating pace of change
- > diversity in the development of infrastructure
- > speed of distributed connectivity
- > enhanced content and network management
- > the social web
- > continuing scientific and technological innovation.

> [Closed environment testing of ISP-level internet content filtering](#) (July 2008)

It was found that the state of ISP-level filtering technology had significantly advanced since the previous trial.

> [Trends in communications, media technology, applications and use](#) (March 2009)

Trends explored in the report covered the continued evolution of the web, and social and economic change driven by use of the social web.

> [Technology developments in the digital economy](#) (August 2010)

This report looked at the network investments in transmission and access networks that provided mobility and higher bandwidth, and increased the capacity for customised multimedia services using smart devices.

> [Sensing and monitoring—recent developments](#) (September 2011)

Research found sensor data can have many origins and contribute to multiple information sources. The report discussed the ownership, control and traceability of both data and derived information, the security of data and privacy-related issues.

> [Developments in next generation applications and services](#) (November 2011)

This report looked at developments in communications-, media- and internet-based applications that were occurring at the application and service level. Both the migration of traditional services and the development of new applications and new ways of interacting were discussed.

Service and content safeguards

The effectiveness of direct regulation in a changing industry and user environment is uncertain. Approaches like those used by regulatory thinker Malcolm Sparrow—who discusses the concept of the ‘mitigation of harms’—can help to explore how a regulator might influence, and potentially intervene, in the behaviour of industry players and citizens.¹

Using research to identify the scope of a problem and test the design of particular interventions, this thinking has influenced the development of regulatory actions from first principles—from reviews of the Commercial Radio Advertising Standard to the *Reconnecting the Customer* inquiry, and the subsequent work in guiding the review of the Telecommunications Consumer Protections Code. Research has informed where there is scope to update regulation to better reflect community expectations and standards, and to rebalance the responsibilities of industry operators in the co- and self-regulatory environment—including where regulation is no longer needed—as well as to identify where individual consumers and citizens are best placed to take action.

¹ Malcolm K. Sparrow, *The character of harms: Operational challenges in control*, 2008.

Telecommunications

In telecommunications, the ACMA has used research for problem identification and to scope the issues of concern to consumers and their impact. Evidence gathered through research has been used in the design and testing of particular regulatory and non-regulatory interventions and to benchmark the outcomes of specific interventions, for example, the outcomes from the industry response to the ACMA's *Reconnecting the Customer* inquiry.

- > [Consumer satisfaction survey report](#) (November 2005)
Satisfaction levels were generally lower than the previous survey, with results for business customers significantly lower than for residential customers in general.
- > [Telecommunications in remote Indigenous communities](#) (September 2008)
Telecommunications service availability in remote Indigenous communities remained significantly lower than in the wider Australian context. While the reasons for this difference were complex, the data presented in this report suggested that isolation from established infrastructure was a strong factor.
- > [Mobile capped plans—consumer attitudes and behaviours](#) (May 2010)
Despite 59 per cent of mobile capped-plan users reporting cost-related factors as the main reason for choosing their plan, 58 per cent of users in Australia aged 15 years and over had exceeded their capped expenditure limit at least once in the last year. Additionally, 57 per cent of mobile capped-plan users did not monitor their mobile expenditure between bills.
- > [Community research into attitudes towards use of mobile payment in Australia](#) (July 2010)
Research indicated that using a mobile phone to make payments introduces a level of consumer expectation of security. Respondents felt strongly that service providers should be responsible for ensuring that security and anti-fraud measures were in place.
- > [3G mobile bill-payers' understanding of billing and charging arrangements](#) (June 2011)
While 77 per cent of consumers were confident in their understanding of the call and SMS inclusions in their plan, just 56 per cent were confident in their understanding of charging for excess usage.
- > [Community research into telecommunications customer service experiences and associated behaviours](#) (June 2011)
The most common telecommunications product consumers contacted a carriage service provider about was the internet (50 per cent), followed by mobile phones (41 per cent) and home phones (32 per cent). Twenty-seven per cent of customers were dissatisfied (gave a rating less than five) with recent customer service from a service provider.
- > [Telco customers—credit management and financial hardship](#) (September 2012)
Most people who contacted their service provider about an unexpectedly high bill reported a satisfactory outcome (64 per cent). Nevertheless, some of those customers using post-paid mobile services reported repeated bill shock or difficulty paying.
- > [Reconnecting the Customer consumer research—tracking consumer outcomes](#) (April 2014)
The findings generally confirmed the usefulness for consumers of the new Telecommunications Consumer Protections Code measures, notably those that help to compare offers and track usage.

CASE STUDY—*Reconnecting the Customer* public inquiry

In April 2010, the ACMA commenced a public inquiry to examine customer care in the telecommunications industry. The *Reconnecting the Customer* (RTC) inquiry was initiated in the context of record levels of consumer complaints to the Telecommunications Industry Ombudsman (TIO), and coincided with a review of the Telecommunications Consumer Protections (TCP) Code by the industry association, Communications Alliance, the body responsible for the development of the code. There were four key issues examined in the course of the inquiry:

1. Are there systemic problems in the Australian telecommunications sector in the way it deals with its customers?
2. If there are problems, what are the causes?
3. What are the potential solutions to any problems?
4. What is the best strategy for addressing customer care issues in the converging communications environment?

In gathering evidence to address these four issues, the ACMA obtained information from a range of sources, including written submissions, roundtable meetings with industry and consumer representatives, public hearings, complaints data, and research undertaken by the ACMA. This evidence base was complemented by a number of research studies the ACMA commissioned specifically to inform its thinking on the RTC inquiry, with five of these studies released at the same time as the inquiry draft report on 1 June 2011. They included the following research reports:

- > [**3G mobile bill-payers' understanding of billing and charging arrangements**](#)—investigated the level and nature of concerns experienced by 3G users in their understanding of charging arrangements (research by TNS Social Research).
- > [**Community research into telecommunications customer service experiences and associated behaviours**](#)—investigated the customer service and complaints-handling experiences of customers in the Australian telecommunications industry and how those experiences affected their subsequent behaviour (research by Roy Morgan Research).
- > [**Behavioural economics and customer complaints in communication markets**](#)—examined the extent to which behavioural economics can explain the dissatisfaction that results in consumer complaints and how insights from behavioural economics can help in the development of more effective regulation (research by Dr Patrick Xavier, Adjunct Professor of Economics and Finance, Curtin University).
- > [**Performance Metrics Research**](#)—examined the metrics that would assist the ACMA to monitor the customer care performance of individual telecommunications service producers and provide customer care information to help consumers select a provider to meet their needs (research by Dr Dave Stewart and Mr Maurie Logan).
- > [**External Dispute Resolution Schemes and Systemic Issues**](#)—examined the TIO's systemic issues function against best practice (research by Calluna Consulting Pty Ltd).

In September 2011, the ACMA published the final report of its public inquiry and proposed five substantive changes to make buying and using a mobile phone or internet service much simpler. These changes were addressed in a revised TCP Code, which developed measures to provide:

- > clearer pricing information in advertisements to allow consumers to more easily compare services
- > improved and more consistent pre-sale information about plans
- > meaningful performance metrics that allow consumers to compare providers
- > tools for consumers to monitor usage and expenditure
- > better complaints-handling by providers.

Other responses to the RTC included findings about the TIO scheme's governance arrangements, and improved industry performance information, which has been addressed by both industry and the TIO in the form of contextualised comparative complaints reporting.

Television and radio broadcasting

Research about Australians' use of media demonstrates that content broadcast on television and radio remains highly significant to many people, notwithstanding the growth of alternative content platforms enabled by digitalisation and the internet.

In the context of changing delivery platforms, research has helped to build evidence about changing community expectations for program standards. It has been used to test whether the existing standards remain effective in protecting children from harmful material and supporting individual privacy, and evidence has informed decisions on where regulation can be revised to reflect updated community standards.

Relevant research includes:

- > [**AM radio issues**](#) (January 2006)
Based on research findings, the ACMA did not see a need for AM-specific changes to the regulatory settings governing control of commercial radio licenses at the time of publication.
- > [**Research studies—Children's Television Standards**](#) (June 2007)
The research informed the ACMA about trends in the television viewing patterns of Australian children, the production and financing of children's television, and television advertising to children.
[**Community attitudes to the presentation of factual material and viewpoints in commercial television current affairs programs**](#) (August 2009)
A large majority of the research participants indicated that for any error, an on-air correction was required, consistent with the medium in which the error was made.
- > [**Listener attitudes to advertising, sponsorship and influence on commercial radio**](#) (February 2010)
Commercial radio listeners in this study demonstrated a strong ability to distinguish advertising from other program material in the less complex radio segments that were presented to them. However, a greater diversity of views were evident for the less scripted and more interactive examples (particularly those with expert interviews and a talkback caller).
- > [**Review of privacy guidelines for broadcasters**](#) (August 2011)
The review informed the ACMA about relevant issues relating to privacy and broadcasting in the context of community attitudes.
- > [**Australians' views on privacy in broadcast news and current affairs**](#) (August 2011)
Most media users in this study believed it was very important for broadcasters to safeguard a person's privacy in news and current affairs programs.
- > [**Community attitudes to live odds and sports**](#) (July 2013)
Sixty-three per cent of Australians found promotion of betting odds during sports-related television programs unacceptable. A further 61 per cent found advertising for betting agencies during sport-related television programs unacceptable.
- > [**Research informing the Contemporary community safeguards inquiry**](#) (March 2014)
 - > **Community attitudinal research**
The research explored community attitudes to, experiences of and expectations of content broadcast on television and radio for a range of matters covered by the existing broadcasting codes of practice.
 - > **The cost of code interventions on commercial broadcasters, subscription television broadcasters and community broadcasters**
Research indicated areas where the nature of safeguards may need to be adjusted to better balance the regulatory burden while maintaining appropriately community safeguards.

- > [Local content research](#) (April 2014)
 - > ***Regional Australians' access to local content—community research***
Research indicated that regional Australians' need for local content was generally being met through a combination of currently available sources.
 - > ***Economic analysis of regional commercial television broadcasters***
Research indicated that the provision of higher speed access to the internet in regional Australia would present both opportunities and threats to regional broadcasters.
 - > ***Regional Australian television news—audiences across regional evening news services 2003–2013***
Research found that free-to-air television news audiences had generally declined over the last 11 years, with a few exceptions.
- > [Children's television viewing](#) (March 2015)
Children, especially young children, are keen watchers of programs specifically made for them. The research, comprising community surveys and television ratings analysis, shows that programs made for children are most commonly watched by children four and under, and most children aged 5–12 watch programs on commercial television, comprising a mix of reality, light-entertainment and children's programs, and movies.

CASE STUDY—the role of research in broadcasting industry codes of practice

In 2013, the ACMA commenced an inquiry to explore and establish the matters that should be addressed in contemporary broadcasting codes of practice. The inquiry's aim was to assess how contemporary codes of practice can be fit-for-purpose in a converging media environment.

Under the Broadcasting Services Act, groups representing radio and television broadcasting licensees may develop codes that apply to the broadcasting operations in each of their specific sectors. Codes are developed in consultation with the ACMA, taking into account any relevant research conducted by the ACMA. The ACMA can only register a code if it is satisfied, among other things that the relevant code provides appropriate community safeguards.

As part of the evidence-gathering for the inquiry, the ACMA commissioned GfK Australia to conduct qualitative and quantitative community research with Australians aged 15 years and over. This community research explored community attitudes to, experiences of and expectations of content broadcast on television and radio. It was designed to complement and supplement existing data published by both the ACMA and others.

To develop an evidence base for and better understanding of the market for content in Australia, the financial performance of the commercial television and radio sectors, and the financial impact of the current codes of practice on those sectors, the ACMA also commissioned PwC to undertake economic research. Similar economic research was undertaken for the subscription broadcast television and community broadcasting sectors.

The various contributions to the inquiry suggested a high level of consensus about enduring concepts and confirmed the core matters that might be reflected in contemporary broadcasting codes under the current co-regulatory constructs. These public interest considerations were strongly correlated with those areas specified in legislation that broadcasting codes may address, and within parameters that did not impose unnecessary financial and administrative burdens on broadcasting service providers. The research also emphasised that these safeguards will need to be sufficiently flexible to accommodate a changing media environment—one that is being radically transformed by content delivered over the internet.

Online services

Innovation in online services is matched by growth in Australians' online activity.

Identifying problems and designing targeted responses using industry collaboration has been an integral part of the ACMA's strategy for dealing with unsolicited electronic messaging. Industry collaborative programs such as the Australian Internet Security Initiative (AISI) provide a direct way for ISPs to promote the security of their networks. The AISI program provides daily reports of malware infections to participating Australian ISPs identifying current malware infections on their networks. These providers—who cover more than 95 per cent of Australian residential internet users—are expected to use this information to identify (on their networks) internet users whose computers are infected, inform those users about the infection and help them to remove it.

Research has helped document the scope and impact of risks to individuals and the economy from harmful electronic messages.

Within this stream of activity, research studies include:

- > [**Community attitudes to unsolicited communications**](#) (September 2009)
Awareness and knowledge of aspects of the Do Not Call Register Act and the registration process itself was generally low. Awareness and understanding of spam was generally high.
- > [**The Australian Internet Security Initiative \(AISI\)—provider responses to security-compromised computers**](#) (October 2012)
The research examined the effectiveness of the AISI reports in triggering action to remove malware from compromised customer computers, and confirmed the usefulness of actions taken to improve network security.
- > [**Malware and harmful software—consumer views on software threats and use of protections**](#) (October 2013)
The majority of adult Australian internet users (82 per cent) reported the view that protecting computers from harmful software was a responsibility shared between internet users, ISPs, computer program suppliers and government.
- > [**Unsolicited telemarketing calls and spam—consumer experiences**](#) (November 2013)
The survey found that the majority of Australian adults received one or more unsolicited telemarketing calls or spam emails in the previous month. Telemarketing calls were generally perceived as more of a problem.



Capacity-building

Under Australian communications and media legislation, self- and co-regulatory arrangements require industry participants to assume responsibility for a great many regulatory details within their own sectors. This is underpinned by clear legislative obligations, with the regulator maintaining reserve powers. In

addition, regulation places particular emphasis on the long-term interest of end users (under the Telecommunications Act) and the reflection of community standards (under the Broadcasting Act). The capacity of citizens to engage effectively with digital communications and media is one crucial element of making communications and media work in the public interest.

Another key component is the capacity of industry operators to access, and then make efficient use of, public resources necessary for their services to operate, as well as to make effective technology transitions. Various research projects have explored enablers and barriers to adoption of new services, and the provision of information to assist citizens in the changing environment.

Industry and citizen participation in the regulatory framework

The separate industry, citizen and consumer interests raise distinct issues for the development and operation of effective self- and co-regulatory arrangements within Australian communications and media regulatory arrangements. These interests include:

- > **Industry**—the interests of industry stakeholders relate to, inter alia, identifying and, where possible, minimising regulatory burdens on business and clarifying the application of any regulation to new industry participants and services.
- > **Citizen**—the interests of the public as citizens relate to regulatory processes and decisions that improve citizen engagement, incorporate citizen perspectives, are transparent and accountable, and ultimately further citizens' participation in society.
- > **Consumer**—the interests of the public as consumers relate to having adequate protections and safeguards, and being able to make fully informed choices about their purchase and use of communications and media services.

Two seminal pieces of regulatory analysis from the ACMA have explored firstly the role of citizens, and secondly the role of industry participants in Australian regulatory arrangements.

Framework analysis



Citizens and the ACMA—exploring the concepts within communications and media regulation

This [paper](#) discusses current public policy developments relating to 'citizens' and their relevance to the regulatory activities of the ACMA. It provides a starting point for discussion and dialogue with stakeholders about how citizen issues are appropriately integrated into the ACMA's service delivery and regulatory activities.

In this paper, the ACMA considers the application of citizen concepts to its role as a regulator of media and communications and, in the course of doing so, explores general concepts relating to 'the citizen' in recent public policy discussions. The analysis examines definitions of 'the citizen' and the 'citizen interest', as a basis for exploring the application of the concepts to communications and media regulation.

It also explores the relationship between the citizen interest and the public interest, in the context of the ACMA's activities and regulatory decision-making.

Optimal conditions for effective self- and co-regulatory arrangements

This [paper](#) identifies a number of general factors or conditions common to the effective and efficient operation of self- and co-regulatory arrangements. It also seeks to identify the conditions where alternative regulatory mechanisms should be considered to address a particular market failure or policy issue. Originally published in 2010, this paper was updated in September 2011 and again in February 2015.

These arrangements provide flexibility for the ACMA, as the regulator, to exercise a variety of roles, depending on the nature of the concern, such as whether the issue is a policy matter or a market issue. This includes the flexibility to *not* intervene—to allow market-based solutions to develop, provide advice to government on policy issues or encourage industry-developed solutions. The analysis also identified challenges to the ongoing effectiveness of self- and co-regulatory arrangements, including pressures arising from changing industry structures and supply chains, rapidly changing technologies and service innovation, and developing areas of consumer concern. Such an environment inevitably puts pressure on sector-based regulation.

Informed by an analysis of government literature and academic perspectives on self- and co-regulation, this research:

- > sets out the place of self- and co-regulation in the regulatory toolkit
- > discusses the Australian media and communications context for self- and co-regulation
- > sets out the ACMA's 'assessment framework' for examining the effectiveness of self- and co-regulatory arrangements
- > outlines a number of alternative regulatory and non-regulatory tools for consideration.

Applied analysis



Industry resource capability

Part of Australia's ongoing technology and service transition requires industry access to the spectrum and telephone numbering resources it needs to offer services across those networks.

Spectrum resources

Spectrum is one such infrastructure input. Research has been used to identify new technology developments and changing consumer use that drives demand for spectrum, and to assist in the regular updating of spectrum demand forecasts. Specific studies have identified demand for mobile broadband as one of the highest value uses of spectrum, which is such an important input to Australia's economic productivity.

Research studies include:

- > [Five-year spectrum outlook series](#) (updated annually)
The five-year spectrum outlook is a vital component of the ACMA's planning framework for spectrum management. It provides information on demand pressures for spectrum, which, in turn, informs consultation on specific spectrum issues and elicits feedback on planning priorities.
- > [Economics of spectrum management—a review](#) (April 2007)
This paper identified multidisciplinary approaches to spectrum management research and proposed the foundations for a general theory of spectrum management.

- > [Mobile network broadband](#) (December 2010)
The take-up of mobile network broadband services (defined in this report to include mobile wireless broadband and mobile handset broadband) had grown significantly over the previous two years and informed planning for future spectrum needs.
- > [Towards 2020—Futures spectrum requirements for mobile broadband](#) (May 2011)
As part of a mobile broadband strategy, this paper looked at spectrum frequency bands below 6 GHz that could possibly be made available for mobile broadband services.
- > [Mobile broadband research—the economic impacts of mobile broadband on the Australian economy; and business mobile communications usage and impact survey](#) (April 2014)
The research highlighted the increasing take-up and use of mobile broadband technologies by consumers and businesses, and quantified the impacts on the Australian economy from making spectrum available for mobile broadband use.

Telephone numbering resources

Numbering challenges are primarily concerned with allowing use of the telephone numbering resource to change in line with evolving community expectations and use, as well as address demands from industry for more mobile telephone numbers. Research studies have informed the ACMA's Numbering Work Program, which set the direction for a more flexible use of telephone numbers. Research provided evidence about changing consumer attitudes, growing service demands for mobile services and the declining relative importance of voice communications in the context of a wider set of choices for messaging and communications. This evidence informed changes to telephone numbering regulatory arrangements.

Specific research projects included:

- > [Mobile Premium Services \(MPS\) user survey](#) (October 2010)
The survey confirmed that the MPS environment in 2010 appeared to be well understood by most users.
- > [Numbering—implications of research into consumer issues](#) (May 2011)
The research found that consumer understanding of most call costs was poor and often confused. The majority of Australians kept a printed telephone directory at home. Telephone number portability continued to show strong use. Current arrangements to deliver geographic number portability might not have remained appropriate.
- > [Mobile calls to 13 numbers](#) (July 2014)
Research found that a majority of Australian mobile phone users did not know or correctly identify how calls to 13 numbers were charged from mobiles, with only one-third (34 per cent) answering they were charged as time-based calls.

CASE STUDY—telephone numbering

Identifiers such as telephone numbers are intrinsic to the design of communications networks because they provide the information that enables communications users to be connected. The Telecommunications Numbering Plan was created in 1997, but reflected the technical requirements of the twisted copper pair network principally installed by the government monopoly in the middle of the last century.

By 2010, these arrangements were under pressure from changes in network and device technology, business models, charging arrangements, and user expectations and behaviour. In some cases, these changes have made the regulation of telephone numbers redundant. In other instances, information intended to provide transparency to consumers has failed to do so, while consumer behaviour has changed.

In 2010, the ACMA initiated a work program to address concerns raised by industry and consumer participants about the Numbering Plan and numbering arrangements.

The first stage of the work consisted of a series of workshops and the release of four consultation papers examining a range of issues with the numbering arrangements:

- > [Structure of Australia's telephone numbering plan](#)
- > [Customer location information and numbering data](#)
- > [Allocation and charging of numbers](#)
- > [Implications of research into consumer issues](#).

Research studies informed this stage of the work program by developing evidence about the extent of change in consumer attitudes to telephone numbers and their service use, and the relative importance of different types of telephone numbers in the context of their available choices for contact and messaging. Research also analysed service demand studies and international regulatory comparisons.

During the second stage of the work program, the ACMA set out its approach to a number of short-term issues to increase flexibility in the use of geographic numbers by removing sector boundaries from the capital cities, increasing capacity for mobile numbers, reducing red tape by removing service types that were no longer in use and removing redundant historical information from the Numbering Plan.

The third stage was the release of the [Telephone numbering—Future directions](#) paper on 28 November 2011, which set out the ACMA's medium- to long-term vision for numbering in Australia. It indicated a managed evolutionary approach to increase the flexibility and efficiency of numbering arrangements while continuing to accommodate change within the communications sector.

The ACMA has continued to implement changes to the numbering arrangements as part of this managed evolutionary approach. During this implementation phase, additional research has been undertaken to test the design of proposed reforms, particularly planned changes to 1800 and 13 number arrangements.

Building capacity for effective digital participation

A defining feature of the growth of online communications and content has been the rise of user participation. The regulator's role in this environment has been to facilitate change, and communicate relevant information and support so that Australians can make informed decisions about the migration of their communications services and have the knowledge and confidence to navigate the changing digital communications and content environment.

Inherently, this involves understanding the relevant technical literacy skills to manage information and communications technologies, as well as the critical thinking skills to allow citizens to evaluate service offers and different forms of content. Research has explored the foundational concepts of media literacy, identified gaps in the current skills of Australians, and also informed the development of practical 'how to' guides for industry and citizens.

Research papers in this stream of activity include:

- > [Media literacy—concepts, research and regulatory issues](#) (May 2008)
The research was instrumental in putting the issue of media literacy on the public agenda, and in informing initiatives to address the digital divide and promote the development of digital literacy skills and abilities.
- > [Digital media literacy in Australia—key indicators and research sources](#) (June 2009)
The paper provided an overview of key research indicators of digital media literacy available in Australia and identified areas for possible future research.
- > [Audit of Australian digital media literacy programs](#) (July 2009)
The audit provided an overview of existing Commonwealth, state and territory policies and programs that aimed to promote digital media literacy.
- > [Adult digital media literacy needs](#) (August 2009)
Research indicated that unmet digital media needs were largely associated with the internet. Communicating the benefits of using digital media was likely to be a useful method for encouraging take-up at a higher level of engagement.
- > [Trends in media use by children and young people](#) (June 2010)
Compared with media use in 2007, this study looked at developments such as digital television switchover and adoption of media-enabled smartphones were giving Australian youth more opportunities to access media content in 2010.
- > [Digital Citizens Guide—research](#) (July 2013)
The general community and ACMA stakeholders understood, and were generally positive about, the concept of digital citizenship and the three underlying digital citizen principles identified in the Guide.
- > [SMEs and digital communications technologies](#) (September 2014)
This research examines the adoption of new technology by small and medium enterprises (SMEs), including the drivers and barriers to take-up.

Transitioning for digital services and devices

Australia's move to digital broadcasting, now completed, involved a decade-long transition for industry, as well as for consumers and the equipment and devices used in the home environment. The series of tracking studies (shown below) built up evidence about current equipment stock levels, and industry capabilities in antenna retuning, and helped inform the design of targeted programs to assist households in digital television switchover.

The digital television tracking studies and digital device research included:

- > [Digital media in Australian homes](#) (November 2005)
- > [Digital media in Australian homes](#) (May 2007)
- > [Digital television in Australian homes](#) (April 2008)
- > [Householder television environment research](#) (February 2009)
- > [Digital radio accessibility](#) (August 2010)
- > [Developments in home networks](#) (February 2011)
- > [Domestic antenna systems—estimating current stock](#) (March 2011)
- > [Television sets in Australian households](#) (June 2012)
- > [TV equipment and antenna stock in Penrith](#) (June 2012).



Engaging in adaptive regulatory practice

In his discussion of regulatory practice, leading regulatory thinker Malcolm Sparrow emphasises the importance of using the pressures from technological, social and market changes to

inform regulatory practice, with a strong emphasis on three elements:²

- > adopting problem-solving approaches
- > breaking down problems into parts with associated measurable tasks
- > using collaborative partnerships in the design and delivery of adaptive solutions.

In communications and media, the ACMA has documented a coherent suite of regulatory strategies and identified the types of strategies that are best suited to solving particular types of problems in this environment. This includes the importance of collaborative engagement with industry partners and global peers to manage problems and risks that arise for industry and citizens in a globally connected communications and content environment.

Framework analysis



Regulatory strategies in a connected digital environment

In June 2013, the ACMA completed the set of strategic narrative papers (begun with *Broken concepts* and followed by *Enduring concepts*) with the release of considerations about a viable coherent regulatory framework in [*Connected citizens—a regulatory strategy for the networked society and information economy*](#).

This paper explored the tension between the regulator's role in administering static regulation and facilitating new technologies and services, while addressing a changing profile of benefits and risk in the connected digital environment.

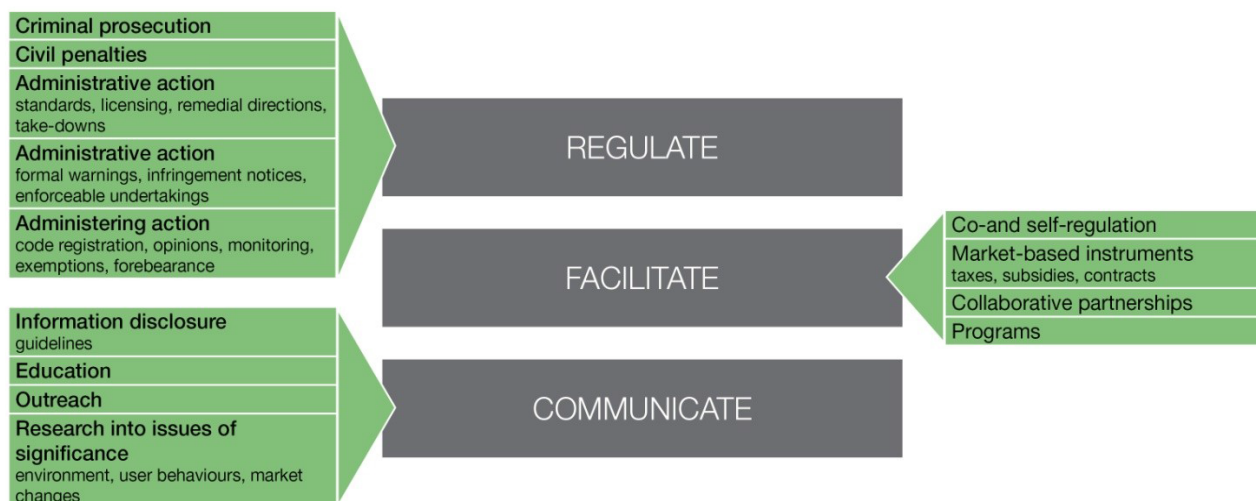
Together, these three papers articulate and support the proposition that the current arrangements for media and communications legislation and regulation in Australia are under pressure for change and not necessarily well-suited to the goal of promoting the public interest.

From this perspective, the evolution of the networked society is driving a need for the regulatory system to be flexible and rapidly adaptive to changing industry circumstances.

The ACMA's working hypothesis is that there are different styles of regulatory tools to address different problems. The view is that regulatory interventions in the future are more likely to skew towards communication and facilitation strategies in order to address digital communications and media issues, largely because this suite of strategies is more flexible and adaptable in a changing environment (see Figure 2). This approach is also consistent with better practice regulation that seeks to regulate only when there is a net benefit.

² Malcolm K. Sparrow, *The Regulatory Craft*, 2000, pp. 28 and 100.

Figure 2 Regulatory and non-regulatory strategies



Applied analysis



Facilitating non-regulatory and program responses

This form of analysis has been applied to the design of communications- and program-based responses. In addressing new risks and concerns arising from new forms of content and individuals' digital communications practices, communication strategies and program-based responses are often more flexible—they can be updated and adapted more frequently to address the changing profile of benefits and risks, in a way that legislative or regulatory-based responses are not able.

Cybersmart programs

The ACMA's Cybersmart programs are designed to support and encourage participation in the digital economy by providing information and education that empowers children to be safe online.

Cybersmart is a national cybersafety and cybersecurity education program managed by the ACMA, as part of the [Australian Government's commitment to cybersafety](#).

The program is specifically designed to meet the needs of its target audiences of children, young people, parents, teachers and library staff.

Research has gathered evidence on the changing information needs of children, young people and their carers in managing their evolving digital practice. Crucially, and uniquely in the field, it has also been used to test education strategies and evaluate the effectiveness of program resources. Related research includes:

- > [Click and Connect—young Australians' use of online social media](#) (July 2009)
The research showed that young people have high awareness of online risks, such as the dangers posed by predators and the risk of cyberbullying. But despite this awareness, some young people were prepared to engage in these high-risk behaviours.
- > [Cybersmart parents—connecting parents to cybersafety resources](#) (July 2010)
Research showed that parents approached cybersafety from a range of viewpoints and that they placed varying levels of importance on the question of online safety, depending on the age of their child.

- > [**Cybersmart Detectives report**](#) (August 2012)
Results of the program evaluation provided good evidence supporting the Cybersmart Detectives game as an important and valuable cybersafety resource.
- > [**Cybersmart Outreach Program Evaluation**](#) (September 2012)
The evaluation clearly demonstrated very high levels of support for Cybersafety Outreach program among students, teachers and parents/carers, and an expressed need to consolidate and extend particular program elements.
- > [**Evaluation of the Tagged education resource**](#) (March 2013)
The evaluation found that the ACMA had developed a resource that clearly connected and resonated with the target audiences of teenagers and teachers.
- > [**Like, post, share: Young Australians' experience of social media**](#) (August 2013)
The research found that children and young people were avid users of social networking services. Children and young people had a high awareness of risk, but there was scope to refine and consolidate the existing strategy to address some key developments.
- > [**Connected parents in the cybersafety age**](#) (February 2014)
The research found that children and young people were most likely to turn to their parents first if they needed to enquire about a potential cybersafety issue, despite community perceptions and anecdotal evidence suggesting otherwise. This key finding reinforced the importance of educating parents and encouraging them to talk to their children about cybersafety.

Collaborative global partnerships and engagement

Extended supply chains and the global reach of the internet has raised new issues for regulation designed for local and national markets.

An analysis of the impacts on regulation of globalisation and the rise of participant users in internet-enabled communications has identified common design features of converged regulation. These include flexible and calibrated regulatory tools; a recognition of shared responsibility between individuals, industry participants and government in an environment where individuals create as well as consume communications and media; and the role of global engagement strategies.

A variety of tools and strategies has been used both domestically and internationally to deal with these issues, ranging from industry and citizen education to enforcement of compliance requirements. Increasingly, the cross-border nature of online activities requires that the regulatory tools in place at the national level be linked to multi-level, international regulatory strategies.

The international comparative studies undertaken as part of the research program have informed the development of regulatory responses to global convergence pressures and the ACMA's approach to working collaboratively across jurisdictions.

These studies include:

- > [**International approaches to audiovisual content regulation—a comparative analysis of the regulatory frameworks**](#) (May 2011)
Many aspects of Australia's audiovisual content regulation framework were found to be similar to those of the jurisdictions examined in this paper. There were strong similarities in the licensing scheme, children's content and the role of self- and co-regulation.

- > [**An overview of international cyber-security awareness raising and educational initiatives**](#) (May 2011)

The research comprised a comparative analysis of awareness-raising programs in 11 international jurisdictions, and a literature review of evaluations undertaken on awareness-raising campaigns in cyber-security.

- > [**Converged legislative frameworks—international approaches**](#) (August 2011)

While the introduction of converged legislation involved significant change, the emergence of internet and online environment issues necessitated further change. Overall, converged legislative frameworks represented an evolutionary approach to regulating for convergence.

- > [**Cross-border regulatory strategies**](#) (October 2013)

Increasingly, the cross-border nature of online activities has required that the regulatory tools in place at the national level be linked to multi-level, international regulatory strategies. This paper examined the effectiveness of compliance, enforcement and education tools in a global online environment.

Conclusion

The ACMA was created in 2005 to be a ‘converged’ regulator, though digital technologies and the increased convergence of content and carriage were at that time still relatively new. Subsequent changes in platforms, applications, business models, value chains and forms of social interaction have tested existing legislation and regulatory constructs ever since.

As part of an evidence-informed practice, the ACMA set about the task of analysing the effects of the changing environment on the regulatory framework. As a result, in August 2011 the ACMA published a research paper titled *Broken concepts—the Australian communications legislative landscape*. This research (updated in 2013) looked at 55 legislative concepts that formed the building blocks of the then current communications and media regulatory arrangements, and found that the majority were either ‘broken’ or under significant strain from the effects of convergence.

In November 2011, the ACMA released the companion paper to *Broken concepts*, called *Enduring concepts—communications and media in Australia*, which considered the public interest outcomes relevant to informing and shaping any necessary regulatory or non-regulatory intervention in the converging communications and media environment.

In June 2013, the third paper in this series was released, titled *Connected citizens—a regulatory strategy for the networked society and information economy*. This paper built on the previous two papers and outlined a strategy for rebalancing regulatory practice to address enduring matters of public interest and solve contemporary issues.

As discussed in this paper, these pieces of work analyse the essential architecture that links the other research pieces, as part of the ACMA’s approach to assist and inform all stakeholders to:

- > understand the pressures for change in the media and communications environment
- > formulate a vision for making sense of these changes
- > build capacity for consumers, citizens and industry to engage effectively with digital communications and media
- > adapt regulation and non-regulatory practices to facilitate each of these elements.

In this context, the ACMA’s approach to evidence-gathering and decision-making has provided the ACMA with a deeper understanding of the changing benefits and risks for industry and consumers arising from communications and media developments, and it has informed the development of tailored interventions to support and facilitate changes in the communications and media regulatory environment that benefit the Australian public.

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