



28 February 2011

Committee Secretary  
House of Representatives Standing Committee on  
Infrastructure and Communications  
PO Box 6021  
Parliament House  
CANBERRA ACT 2600

Dear Committee Secretary,

**Re. Inquiry into the role and potential of the National Broadband Network (NBN)**

I attach a submission from Museums Australia relating to the Committee's Inquiry into the role and potential of the National Broadband Network.

In the event that the Committee requests that Museums Australia give evidence in relation to the attached submission, we can be contacted on telephone number [redacted] as the National Office of Museums Australia, which is located in Old Parliament House.

Yours sincerely

Dr Darryl McIntyre, FAIM  
National President, Museums Australia



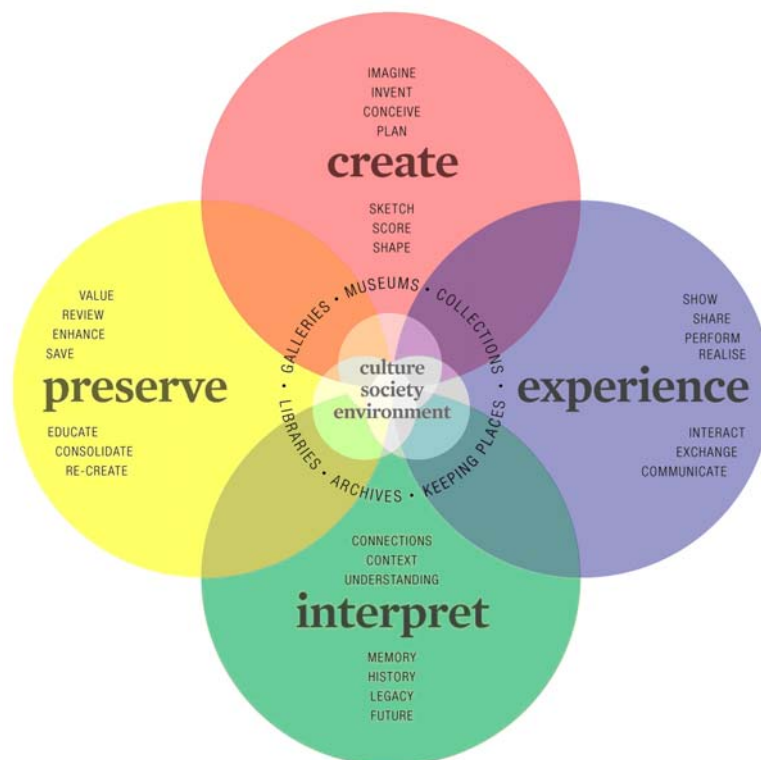
Museums Australia is the national association for museums and galleries in Australia.  
ICOM-Australia (National Committee of the International Council of Museums, Paris) is a key partner.

---

**Museums Australia Submission to  
Commonwealth Inquiry into the National Broadband Network  
(NBN)**

(House of Representatives Standing Committee on Infrastructure and Communications)

25 February 2011



**ACKNOWLEDGEMENTS**

This submission has been prepared by:  
Dr Darryl McIntyre, President, Museums Australia,  
Bernice Murphy, National Director, and the Museums Australia National Office  
(MANO headquarters: c/- Old Parliament House, Canberra)

## Table of Contents

Table of Contents .....	i
Preface.....	1
TOR (1): The delivery of government services and programs .....	1
The richness of national heritage resources in museums-sector collections.....	1
Museum Metadata Exchange Project (in process) .....	1
Evolving 'born-digital' content shaping Australians' cultural identity and heritage .....	1
National broadcasters' interest in museums and galleries.....	1
The challenge of content conversion to digital formats and access .....	1
Heritage protection through digitisation .....	2
Infrastructure and storage of cultural heritage assets .....	2
TOR (2): Achieving health outcomes .....	2
An ageing population served positively by cultural amenities and activity .....	3
Disability access programs.....	3
Improved health outcomes in both mainstream and Indigenous communities.....	3
TOR (3): Improving educational resources and training available for teachers and students .....	3
Resources for lifelong e-learning and content for the new national curriculum.....	3
New digital content via the NBN.....	4
Interactivity virtually.....	4
Increased access to national heritage for all Australians .....	4
TOR (4): The management of Australia's built and natural resources and environmental sustainability .....	4
National and international projection of Australian heritage and identity.....	4
Increased audience engagement and relevance to communities.....	4
Increased knowledge facilitating improved awareness and management of resources .....	5
TOR (5): Impacting regional economic growth and employment opportunities.....	5
Economic, business and employment opportunities improved through digital access .....	5
Tourism stimulated by digitised cultural heritage and access to museums-sector resources.....	5
Small-business or independent employment opportunities in regional communities depend on client connectivity .....	5
TOR (6): Impacting efficiencies and revenues, particularly for small and medium business and Australia's export market.....	5
Enriched content for NBN communication channels stimulating internal and export activity.....	5
Increased productivity and economic multiplier impact through digital technologies.....	6
Improved cultural connectivity stimulating national and international markets.....	6
TOR (7): Interaction with research and development and related innovation investments.....	6
The Atlas of Living Australia .....	6
ANDS project/Museum Metadata Exchange platform.....	7
TOR (8): Facilitating community and social benefits.....	7
Digital access to Australia's 'distributed national collection' of culture and heritage .....	7
National and international awareness of Australian heritage and identity.....	7
Cultural diversity and social inclusion goals .....	8
Indigenous heritage continuity and languages preservation.....	8
Support for regional development of Australia's smaller communities and heritage .....	8
TOR (9): The optimal capacity and technological requirements of a network to deliver these outcomes.....	8
Investment in infrastructural resourcing and content delivery.....	8
Museums-sector engagement with national broadcasters .....	8
Interconnecting the education sector, cultural sector and broadcaster resources.....	8
Concluding comments .....	8
Digital access raises community pride in heritage and its protection .....	9
Development and promulgation of improving standards of digital access .....	9
Digital access stimulating increased interest in objects and visits to museums and galleries.....	9
A framework for further development .....	9

Attachment: *Profile of Museums Australia* (pp.11-12)

## **Preface**

This submission by Museums Australia is structured according to the National Broadband Network Inquiry's Terms of Reference (TOR). An **Attachment** at the end provides a snapshot profile of Museums Australia as the national organisation for the museums sector – indicating the geographically broad network of museums and galleries stretching across Australia and the diverse communities they serve.

### **TOR (1): The delivery of government services and programs**

#### **The richness of national heritage resources in museums-sector collections**

Museums as well as art galleries, libraries, archives and other cultural institutions – such as historical societies – hold large collections of artefacts and documents, as well as comprehensive collection information and documentation, which are used not only in exhibitions but also increasingly for research purposes by academics and members of the public.

#### **Museum Metadata Exchange Project (in process)**

The Council of Australasian Museum Directors (CAMD), with Museums Australia as an auspicing partner organisation, received \$500,000 funding in 2010 from the Innovation, Industry and Science portfolio (DIISR), as part of the Australian National Data Services (ANDS) program. The aim of the project (now in process) is to develop *a comprehensive national database of museum collections and documentation that can be accessed electronically by researchers*. As museums are funded by government (federal, state and local governments), the outcomes of this project will ensure that academics, research students and members of the public will be able to have more immediate access to the rich resources of information on Australia's cultural and scientific heritage, through facilitating direct access to the knowledge relating to collections held by cultural institutions right across the museums sector.

#### **Evolving 'born-digital' content shaping Australians' cultural identity and heritage**

In addition, new cultural works are daily being created in digital form only ('born-digital' works such as films, television programs and some sound recordings, including digital radio broadcasts). Meanwhile many of the physical collections held by libraries, archives and museums are being digitised for online access by scholars, students, school e-learners and the general public. The roll-out of the National Broadband Network (NBN) across Australia, interconnecting metropolitan cities, outer urban areas and the nationally distributed communities of regional Australia, will ensure that all Australians have greater access to cultural resources as well as to government services and programs.

#### **National broadcasters' interest in museums and galleries**

Importantly, national broadcasters such as the ABC and SBS have expressed interest in working with cultural institutions: to be involved in digital access to the rich content they hold (from social history and culture to natural history and scientific heritage) so that the diverse materials held in museum collections, and associated information, can be used in documentaries, features and other programs that would be broadcast nationally to all Australians. Future programs might also be converted readily into DVDs for sale.

#### **The challenge of content conversion to digital formats and access**

While the horizon of communications development seems infinite, cultural institutions nevertheless do face challenges relating to digitising their collections. Many collection records, and rich associated information enabling interpretation, presently reside 'out of reach' in legacy formats (that is, card records) or embedded in complex electronic documentation systems used by host institutions. Substantial funding is required to digitise collections, to create digital libraries and archives that would make the collections more accessible to all Australians for research, educational and general interest uses.

**Heritage protection through digitisation**

Since many cultural institutions are vulnerable to natural disasters (notably bush fires, floods, cyclones and earthquakes), it is important that their collections and associated documentation be digitised, and the digital records be held for safe keeping in state museums, archives and libraries, as precaution against the tragic event that museums or their collections may be destroyed as a result of a catastrophic natural disaster (as was the case with the Victorian bush fires in 2009, and again with the recent floods in Queensland and Victoria).

**Infrastructure and storage of cultural heritage assets**

One of the first-stage challenges of digitisation faced by cultural agencies nationally and internationally is the huge task of achieving a centralised infrastructure and digital storage. Creating and managing digital assets for delivery on the NBN, however, is part of a major endeavour that will engage cultural institutions for many years: around the objectives of networked public access to the riches of our history and heritage, through digitised delivery of content on interconnected electronic platforms.

**Resource investment in cultural heritage institutions as providers and content producers**

Harvesting the potential outlined above will require substantial financial investment to support a comprehensive digitisation program. For all cultural institutions, digitisation is a far-reaching issue and challenge at the resource-level, both in Australia and internationally. In the USA and Europe, governments have appropriated substantial funding for this objective (in the USA the allocation is \$100 million; and in Europe the allocation is currently 500 million Euros for cultural institutions in the Netherlands, Germany, France and Scandinavia). Meanwhile digitisation is slowly being advanced in cultural institutions across the United Kingdom.

**Digital connectivity providing new experience in museums and galleries: on-site and on-line**

In addition to 'back of house' benefits of the NBN – and increased opportunities for people to connect remotely with museums across the country – there are increased opportunities for museums themselves to provide and evolve new forms of their public programs and exhibitions in-situ and on-line. For example museums are now actively concentrated on enriching the 'total museum experience' for visitors, who have in recent decades demonstrated a great and continuing interest in engaging with cultural heritage from Australian institutions, enjoying diverse public programs, talks and leisure activities, as well as continuing to visit capital city institutions for rare compilations of diverse cultural material from abroad in major touring exhibitions.

Meanwhile there are now numerous examples of digital technologies enabling new forms of exhibition or public program experiences *in* museums, such as distributed exhibitions across different sites; real-time connections between visitors at different sites; digital artworks that make use of these technologies on-line; or delivering real-time data or images/video into an exhibition from a remote site. On-line access and connectivity have become core components of the cultural experience and social enrichment that museums seek to provide *year-round*, and connectivity is a crucial component of democratising these opportunities beyond postcodes and social divisions.

Increasingly museums and galleries are tailoring *new kinds of social experience* for visitors to exhibitions, targeting additional needs of a more motivated public expecting leisure amenities as well as entertaining experiences when visiting. These changes may be highlighted in the rise of Children's Gallery areas as off-shoots to exhibitions; the development of all-family or blended-family programs targeting a socially bonding outing for people of various ages; or the rise of late-night events for young adults, providing entertainment and social interaction as an adjunct to being engaged with collections. The projection of these new forms of social enrichment depends greatly on museums' increased utilisation of on-line platforms and connectivity for public communication and access provisions.

**TOR (2): Achieving health outcomes**

Museums and cultural institutions might seem at a remove from the health sector in terms of government provision. However it is noteworthy in terms of health outcomes that there are numerous *indirect* benefits to community health, since increased enjoyment of cultural amenities is now widely recognised as an important component of social capital and well-being within communities.

### **An ageing population served positively by cultural amenities and activity**

Cultural amenities and their ready accessibility (including in digitised formats on internet platforms) have directly supportive effects for improved health of communities composed of an ageing population, with more leisure time to enjoy productively. Many studies have shown that cultural activity and self-directed use of leisure helps to offset or forestall symptoms of dementia and other forms of decline of mental acuity among ageing people – our art galleries (for example, the National Gallery of Australia) are now developing programs directly tailored to visitors suffering Alzheimers disease, and the promotion of such programs, to individuals and carers, is increasingly being achieved through digital networks.

### **Disability access programs**

In addition to alterations to buildings and increased physical access, the museums sector has actively engaged over recent decades with disability access issues. Programs have been developed that accommodate specific kinds of disability, from intellectual and social access disadvantages to various kinds of physical disability (including visual disability).

The now recognised diversity of the broader population seeking to overcome access-barriers through various forms of disability – an expanding range of community groups understood to need disability recognition and proactive attention to their needs – is being serviced more readily through digital access and platforms tailored to their needs, for both off-site learning and onsite visits to cultural institutions. Many groups that were traditionally excluded have become participating members of museum communities and the programs they provide. These developments help to ensure direct health-dividends for Australian communities in all parts of the country. Digital resources, increased digital delivery and ready access to networked information, are key to these outcomes.

### **Improved health outcomes in both mainstream and Indigenous communities**

The direct benefits to identity, pride and social continuity in Indigenous communities through cultural heritage care, and their direct involvement in preservation of their heritage with resulting employment opportunities stimulated, are amply demonstrated through years of governmental reports. Indigenous communities are utilising internet platforms for the production and marketing of their art, and digital dissemination of cultural information as well as associated environmental information and protection, even more actively in many respects on a comparison with the population at large. The upsurge in cultural marketing activity through digital connectivity is one of the single most dramatic indicators of resurgence of Indigenous identity, self-directed purpose and pride in recent years, with direct on-flow effects on Indigenous wellbeing and health.

Culturally active communities are demonstrably healthier communities socially and physically. Digital resources are increasingly being drawn upon for the access of cultural amenities and promotion of positive use of leisure, health and wellbeing.

## **TOR (3): Improving educational resources and training available for teachers and students**

### **Resources for lifelong e-learning and content for the new national curriculum**

Increasingly cultural agencies and the education sector are delivering e-learning resources to school students: through programs such as ‘the connected classroom’ in New South Wales, and preparations for the adoption of the national curriculum by all states and territories. The national curriculum will soon provide opportunities for the whole education sector – at primary and secondary levels, initially, and later impacting throughout the tertiary education sector – to draw on the collections and information dat-aset held by cultural agencies. This information has a great public-sector enrichment potential: in the direct delivery of educational resources (‘learning objects’ for schools); in the provision of excellent ,wider e-learning resources for use in the class room or at home; and in provision of materials equally useful to

universities and the TAFE sector (for example, for TAFE and university courses in history, English, foreign languages, geography, natural sciences and environmental studies, as well as other courses in social sciences, technologies, economics, the humanities and the arts).

**New digital content via the NBN**

The most exciting impact of digitisation will be the delivery of new digital content into classrooms and homes through the National Broadband Network. Australia's diverse histories will 'come alive' in new ways, with instant access to primary sources such as the voices, images, film clips, sound recordings and documents relating to Australia's history (pre- and post-European settlement), as well as through material relating to Australia's environment, natural history, political development (democratic institutions), geography and the arts.

**Interactivity virtually**

Educators working in museums and cultural institutions would be able to interact virtually with school and university audiences and cultivate forums for exploring topics in more depth and from varying perspectives. Primary, secondary and tertiary students would be able to ask questions of the educators and receive an immediate response to their questions. Such sessions could be recorded and then downloaded by visitors to museums and cultural institutions through on-line access within these institutions. Lifelong learners will be able to guide their own learning, drawing on the collections held by all collecting institutions while also interacting with the educators and curatorial staff of the collecting institutions.

**Increased access to national heritage for all Australians**

Digitisation will provide the Australian public unprecedented access to a much greater percentage of the immense records of the nation's collecting institutions – especially accelerated through the National Broadband Network – thus providing better tools with which to nurture and enhance educational opportunities, and exponentially expanding digital educational resources and training opportunities for teachers and students.

**TOR (4): The management of Australia's built and natural resources and environmental sustainability**

The Australian cultural sector has a strong interest in recording, preserving and interpreting Australia's built and natural resources and environmental sustainability. Many of Australia's leading national and state institutions have developed extensive, in-depth collections relating to Australia's historic development, its built heritage and natural resources, including the nation's environmental history and continuing sustainability. These collections are used in exhibitions, public programs, lectures and publications within institutions, as well as being disseminated more broadly through a variety of educational programs, including working with regional communities to develop travelling exhibitions.

**National and international projection of Australian heritage and identity**

The NBN provides an excellent opportunity for all Australians (and similarly for international audiences) to learn and understand more about Australia's unique heritage, the nation's built and natural resources (especially in the context of global warming and its effects on Australia's climate and weather in recent times) together with environmental history and sustainability. This knowledge might be delivered in the form of educational programs on-line, virtual exhibitions and contextual lectures by curatorial staff and the academic community, incorporating enhanced access to collections and associated documentation held by museums, with opportunities to engage with curatorial staff if members of the public have follow-up questions.

**Increased audience engagement and relevance to communities**

Such direct interface through electronic platforms will allow museums to steadily increase their engagement and relevance to the audiences they serve. This will enrich opportunities for the public to have a greater understanding of public collections relating to cultural and social history as well as natural resources, environmental history and sustainability. Museums would be enabled to develop new exhibitions and programs that meet the changing needs and expectations of the Australian public, and

deliver virtual exhibitions and public programs through the National Broadband Network, so that they reach all Australians and, where possible, international audiences.

**Increased knowledge facilitating improved awareness and management of resources**

Increased knowledge of our history and long-developed resources nationally – especially natural history and environmental resources, for which the primary scientific data-sets historically are held in museums – will have a direct impact on increased awareness, value-setting and management of our resources and their long-term sustainability.

**TOR (5): Impacting regional economic growth and employment opportunities****Economic, business and employment opportunities improved through digital access**

The roll-out of the National Broadband Network across all of Australia will create an environment in which businesses – in both metropolitan and regional cities and towns – application developers, exporters of digital services and home consumers have access to all the connectivity they need. The challenge is to harness the power of the ever-expanding digital environment to create an innovative, high-income developing, knowledge-based economy that will generate prosperity for both government and all Australians in the twenty-first century.

**Tourism stimulated by digitised cultural heritage and access to museums-sector resources**

Tourism depends on access to high-quality cultural experiences, and access to institutions such as museums, galleries, historical sites and buildings that convey our *tangible heritage*, as well as to the stories, interpretations and values-communication that are an inseparable component of these institutions' ability to convey Australians' *intangible heritage* and identity. Tourism is a huge economic-multiplier factor for regional communities, when visitors are stimulated to visit cities and rural/remote towns (notably including Indigenous heritage) and provide direct economic injections of resources to local communities, including stimulating employment opportunities. Networked digital access to public information about Australia's unique heritage and collecting institutions is a vital component of infrastructural support to tourism, reaching international audiences as well as Australians, wherever they reside.

**Small-business or independent employment opportunities in regional communities depend on client connectivity**

The museums sector has been transformed in recent decades by changes in its disposition as an 'industry' nationally, with individual museums large and small increasingly relying upon the input of consultants and a range of external industry suppliers. Increased mobility of museum workers and suppliers is a feature of the museums sector across the country today. There are increased job opportunities in regional communities (including Indigenous communities) that depend directly on connectivity and having the ability to transmit data quickly – perhaps to clients in far-distant locations (and in the case of Indigenous art, that critically means markets). There are job opportunities potentially in regional communities, in areas such as agency cataloguing or digitising of collections, which can be uploaded immediately to the users' systems elsewhere. Graphic designers, for example, could get their work to client institutions quickly, even if they have very large data-files to relay – subject to their ability to depend on connectivity and on-line access.

**TOR (6): Impacting efficiencies and revenues, particularly for small and medium business and Australia's export market****Enriched content for NBN communication channels stimulating internal and export activity**

A high-speed National Broadband Network requires innovative content and application to enrich its communication channels. Digital production means that cultural content creators and providers can use digital networks to reformat, package, disseminate and sell their work locally and internationally, thereby reaching consumers directly. Creating high-value content, both for all Australians and for export internationally, is an area where Australians can lead the digital world, especially through establishment of a digital content innovation cluster. This will boost Australia's production of applications in the areas



of e-learning, e-health, and help drive demand for widespread national broadband connection. It will also enhance the productivity and competitiveness of important export industries, by creating digital solutions tailored to economic growth, and by creating business efficiencies and revenues for small- and medium-sized businesses and taking into account Australia's export markets.

### **Increased productivity and economic multiplier impact through digital technologies**

Improved productivity is the key to transforming the Australian economy, and investment in digital technologies is needed for such improvement. If *culture and heritage productivity* is increased across the economy, the wealth generated can be used to augment shared social and environmental goals – including better health and education, smarter, environmentally friendly production techniques and better communications on a national scale. This will also generate employment opportunities by retaining skilled Australian employees on the one hand, and on the other, attracting new migrants with relevant skills, information and communications technology expertise who are required for digital development.

### **Improved cultural connectivity stimulating national and international markets**

Rapidly evolving digital technologies entail fundamental changes both in the ways that we do business and the kind of business that we do. Australians need to exploit the potential of the digital world (accessed through the National Broadband Network) to foster entrepreneurship, creativity and innovation, and to use digital technologies to increase productivity across the whole economy. The NBN's connectivity improves access to knowledge about national and international markets, and creates faster connections to customers/communities and suppliers, in addition to stimulating entrepreneurial niches and capturing new sales and marketing channels that are dependent on overcoming distance.

## **TOR (7): Interaction with research and development and related innovation investments**

Museums and other cultural institutions hold very large collections and associated documentation that are of great interest and use to researchers, while also having a quickening potential (through the evolving Internet environment) of educating, exciting and drawing in the engagement of the public at large, in understanding our unique heritage and history and accessing useful resources for a range of purposes.

### **The Atlas of Living Australia**

The Atlas of Living Australia is an outstanding, ever-growing achievement of the natural history collections community within the museums sector, which has been coordinated, auspiced and hosted through CSIRO (the Commonwealth Scientific and Industrial Research Organisation).

Already a highly accessible public resource on Australia's biodiversity through its web-portal, the Atlas of Living Australia continues to be a 'work in progress' as a national, collaborative initiative 'to improve access to essential information on Australia's biodiversity by providing tools for researchers and others to access, combine and map data on Australian species'.

The Atlas of Living Australia draws together the in-kind contributions of major museums and colleague institutions in accessing their unique collection resources, data-sets and associated information on an exciting new electronic platform whose development has been funded under the National Collaborative Research Infrastructure Strategy (NCRIS). This initiative is assisting museums, herbaria and other biological and scientific collections to publish and share their data online, while also using natural history collections as a rich base on which to develop tools to support research into Australia's biodiversity. In terms of public engagement, one example of the exciting yields to date of the Atlas of Living Australia has been its stimulus to participative data-gathering (especially natural history observation) around the country that draws in members of the public alongside institutional specialists – often referred to as 'citizen science'.

A growing, visually engaging and accessible public facility such as the Atlas of Living Australia, while supporting the advance of scientific research and understanding, is also proving to be an invaluable resource for a wide variety of public-information purposes that are of direct benefit to enterprise activities across the horizon of agriculture, industry and business development in Australia.

In the context of climate change, and the rising awareness of farming, business and industry changes that need to take account of environmental impacts occurring across the country, the natural history collections and related information held in our museums and archives provide *the primary data-sets* on which any long-term understanding and projections of environmental change are based. Accordingly, the front-line input of museums' information, interpretation and research-data to broad issues of business and industry innovation – and the challenges facing us all in a changing world – is accelerating dramatically as a 'public good' contribution of the museums sector to the nation's welfare.

Details of the Atlas of Living Australia's exciting features, and of the museums contributing to this project, are available at: <http://www.ala.org.au/about/atlas-partners/>

### **ANDS project/Museum Metadata Exchange platform**

The ANDS project /Museum Metadata Exchange platform – a joint collaboration between the Council of Australasian Museum Directors (CAMD) and Museums Australia (mentioned above) – will in time enable on a common platform a greater sharing of public collections data and the associated expertise that exists within the collecting institutions across the country.

The goal of the project is to assist all partner museums to create standard collection-level descriptions that can be (a) directly accessed by researchers through the Australian Research Data Commons (ARDC) and (b) explored further by working directly with the participating museums. The ANDS/MME project focuses for the first time on cultural and historical collections and researcher communities in the humanities. When the current project-work is completed, it is hoped that its outcomes might be used to demonstrate the potential for development of subsequent projects, with positive implications for the wider museums and research sectors, and for museums and universities to undertake further collaborative projects, including Australian Research Council linkage grant applications.

Over time, the ANDS/MME project will facilitate development and implementation of a national program to make Australia's cultural and historical collections systematically discoverable and accessible. The project will raise the profile of museums and other collecting institutions as research repositories, and enhance their value in research, education and policy input as well as leading to innovative research opportunities. The data held by the ARDC (Australian Research Data Commons) will lead researchers back to the source museums involved, and potentially foster new and innovative research collaborations between museums and scholarly researchers.

## **TOR (8): Facilitating community and social benefits**

### **Digital access to Australia's 'distributed national collection' of culture and heritage**

The NBN's potential would increase opportunities, for museums and audiences alike, to use coordinated digital platforms to build connections (both exhibition/program-based and drawing on research connections) between institutions that hold complementary collections and related material within what has in recent years been known as the distributed national collection of Australia's cultural and scientific heritage. The story of Ned Kelly; the discovery of gold; the experience of drought, flooding and bushfires; immigration's contribution to development; the national and local experiences of war: all these themes would lead audiences and researchers to many different types of institutions holding material that illuminate them. Greater digitisation and access to digital initiatives, as spurred by the NBN's roll-out, would enrich our knowledge and the value of significant objects in collections, by making related objects and records held in different institutions more discoverable. The NBN provides the opportunity for the museums sector to build improved digital links, both for researchers and the public's enrichment. This could stimulate better sharing of information, research opportunities and enhanced understanding of those collections by the inheritors of the legacy of our nation's achievements collectively.

### **National and international awareness of Australian heritage and identity**

These cultural resources are of national and international significance, and it is crucial that all Australians (and potentially international audiences) have access to these collections and associated

information through the National Broadband Network, so that their significance and cultural, social and intellectual meanings can be understood and appreciated by all.

**Cultural diversity and social inclusion goals**

For highly diverse and multicultural communities, there will be an enhanced opportunity to access SBS television and radio programs in learner/audience languages as well as listening to programs in English.

**Indigenous heritage continuity and languages preservation**

Importantly, Indigenous communities will be able to hear programs in their own languages, so that their languages are thereby preserved and maintained by successive generations of Indigenous people.

**Support for regional development of Australia's smaller communities and heritage**

Better and more widespread digital connectivity can help programs run either by professional bodies or larger cultural institutions to professionally support smaller and regional collections. As one example, greater access to broadband and greater take-up of digital services can broaden the reach of community museum and community history projects – which are vital in support of tourism nationally; comparable increased support for Indigenous Keeping Places, cultural centres, and their communities must also be profiled as an important social and cultural policy goal,

The benefits of greater sharing of cultural heritage knowledge are twofold at the regional level: better support of smaller collecting organisations enriches the volunteering experience for those who are caring for smaller collections (and the regional museums of Australia are hugely and sometimes wholly dependent on volunteers); meanwhile culturally active communities are healthier communities – as discussed under **TOR (2)** above, relating to *health outcomes* nationally.

**TOR (9): The optimal capacity and technological requirements of a network to deliver these outcomes****Investment in infrastructural resourcing and content delivery**

The roll-out of the NBN needs to reach all Australians – in metropolitan communities as well as in regional and remote Australia (including Indigenous communities). While the cost of the roll-out of the NBN and its long-term maintenance might be high, it is critical that all Australians, irrespective of where they reside, have equity of access to content delivered by broadcasters, as well as to the collections (both tangible and intangible) and associated resources, including e-learning resources, held by museums and collecting institutions.

**Museums-sector engagement with national broadcasters**

The roll-out of the NBN will provide communities, especially those in regional and remote Australia, with the opportunity to access information held by cultural institutions on the web, and facilitate greater access to related digital programs delivered by the national broadcasters (television and radio).

Increasingly schools will utilise 'the connected classroom' (drawing on the New South Wales model), and interact with broadcasters and cultural institutions as part of the delivery of schools programs, especially when the national curriculum is adopted both federally and by state and territory education departments alike. Simultaneously there will be public benefits in improved access to knowledge.

**Interconnecting the education sector, cultural sector and broadcaster resources**

Engagement with broadcasters will allow schools and lifelong learners to have ready access to rich educational programs and linked learning resources. Increasingly, e-learning resources and video-conferencing will facilitate engagement between educators, learners and museum staff, as a regular part of educational programs delivery. This will also yield community and social benefits long-term.

**Concluding comments**

For some years cultural institutions have been making incremental progress, both in and towards digitisation, and in making their digital collections more accessible on-line. Visitors and users of our cultural, scientific and historical institutions have a growing expectation of digital access to information and collections, and digitisation is dramatically improving access to these collections.

### **Digital access raises community pride in heritage and its protection**

At the same time museums and cultural institutions will continue to place an emphasis on collections care and management, and continue to enhance the digital quality of their digital resources available on-line.

### **Development and promulgation of improving standards of digital access**

Increasingly the national and state cultural institutions will play a leadership role in the promulgation and implementation of standards relevant to digital preservation, and share information relating to these standards. Many institutions also participate internationally with the development and implementation of standards relevant to digital preservation, as well as pursuing policies, procedures and practices that meet digital preservation requirements, and are clearly documented and consistent with best-practice standards world-wide.

Cultural institutions will continue to maintain hardware, software and storage media containing digital content, in keeping with prevailing best practices to the best extent possible. Importantly, cultural institutions will comply with intellectual property, copyright and ownership rights evolving for all digital content. It is also important, once collections are digitised, that the host institutions maintain resources to continue to preserve and protect the collections in their care, since it may be necessary in subsequent years to *re-digitise* collections and associated documentation, as new digital formats are developed over time – and as many ‘born-digital’ forms of cultural heritage are being progressively captured, ‘curated’, archived and preserved in the public domain.

### **Digital access stimulating increased interest in objects and visits to museums and galleries**

Digitisation and digital access have *not* – as once anticipated apprehensively – eroded the public’s interest in museums and cultural heritage institutions, their collections, exhibitions or public programs. On the contrary, museum visitors continue to be keen to see *original objects* on display in collections and exhibitions. The development and diversity of temporary and travelling exhibitions – and the important governmental stimulus to touring exhibitions provided by state programs; the Australia Council’s grants to artists and arts organisations; the Commonwealth government’s exhibitions touring program, *Visions of Australia*; government indemnity provision; and the major cultural projects through Art Exhibitions Australia – have demonstrated overwhelmingly that a huge public interest in exhibitions of cultural heritage and associated programs has arisen since the 1970s, when these possibilities arose.

All these achievements and continuing potential have been accelerated dramatically through digitisation, expanding internet platforms and electronic access to culture and heritage. Meanwhile it is important that Australia’s position in the global digital information environment is enhanced.

### **A framework for further development**

A framework for strategic development in the future can be indicated by the following goals:

1. **Strengthened content:** so that, over time, Australia’s information assets and accumulated knowledge are in digital formats.
2. **Ensured preservation:** so that all Australians can have continuing access to their country’s digital knowledge and information assets, and future generations will have evidence of our nation’s intellectual and creative accomplishments. Importantly, collections at risk from major natural disasters also need to be preserved, so that a permanent record of these collections is preserved by state libraries and museums.
3. **A trusted digital repository:** to capture the many opportunities now presented to enhance the public familiarity reputation of all museums and cultural institutions as twenty-first century scholarly and public resources – through developing, implementing and managing the systems necessary to support their digital assets; and by combining a trusted digital repository with best practices in adopting high digitisation standards and data-migration policies.

- 4. Maximum access:** so that all Australians will have optimal access to digitised information important for their learning, business and work, leisure activities and cultural identity, and equally important to ensure that Australian content and creativity can be showcased to the world.

The digitisation of cultural, historical and scientific collections will also take account of the Gershon Report recommendations (released October 2008), as well as immeasurably building upon and enhancing the outcomes of the Australian Government's Web 2.0 initiatives.

In conclusion, the roll-out and implementation of the Government's National Broadband Network across the nation will enhance public access (for metropolitan, regional and remote centres alike) to the nation's cultural, historical and scientific collections and the online information resources that amplify their richness: as evidence-bearers, information resources and interpreters of our national development, identity and heritage for all Australians.

**Attachment 1: *Snapshot of Museums Australia as a national organisation***



## Attachment

# Profile of Museums Australia

*(Formed 1994, combining various museum organisations, dating back to the 1930s)*

**Museums Australia (museums + galleries)** encompasses a diverse range of museums, galleries, historic sites, heritage centres, botanic and zoological gardens, research centres, Indigenous Cultural Centres, and Keeping Places across Australia; it includes some other cultural heritage organisations.

MA is a service and professional development organisation. It seeks to provide professional stimulus and value for the whole museums sector nationally (and especially regionally).

- MA produces **programs and services nationally**, not confined to MA members alone;
- MA works with a **range of "third sector" partners in the non-profit area of cultural heritage** provision – e.g. Federation of Australian Historical Societies, ICOMOS, ACNT;
- MA is not a union or lobbyist organisation – remuneration and employment conditions are matters for relevant employing authorities at all levels of government or other bodies;
- As a service organisation, MA is focused as much on museums' **service to Australian communities** as on the **capacities of museums** themselves to increase resources and skills, and render such service;
- MA also **acts internationally** as a museums organisation (and especially – in partnership with ICOM-Australia – with proactive attention to the Asia-Pacific region).

## MA Membership

Membership (December 2009): **1673 members**

- **759 individual members** = 51%
- **731 institutional members** = 49% (reaching many more individuals through the large institutions than can ever be calculated precisely)

### A current national snapshot of MA institutional members

*(This snapshot captures the variety of institutions, from tiny, regional and remote, to large/capital city institutions; from parks and zoos to galleries)*

#### Australian Capital Territory

In addition to the major institutional members of MA in Canberra (**National Gallery of Australia, Australian War Memorial, National Museum of Australia, Old Parliament House**) MA ACT includes the following institutional members:

- Australian Customs Service
- ACT Historic Places (incl. Lanyon Art Gallery; Blundells Cottage)
- Canberra Museum and Art Gallery (Canberra Civic)
- Australian Natural Wildlife Collection (CSIRO)
- Australian Council of National Trusts (ACNT)

#### New South Wales

- Art Gallery of New South Wales (Sydney)
- The Australian Museum (Sydney)
- Lake Macquarie Regional Gallery (Lake Macquarie)
- Zoology Museum, University of New England (Armidale)
- Goulburn Regional Art Gallery (Goulburn)
- Goulburn Mulwaree Parks and Recreation Services
- McCrossin's Mill Museum (Uralla)

#### Northern Territory

- Museum and Art Gallery of the Northern Territory (Darwin)
- Northern Territory Police Museum, Winnelli (Darwin)
- Catherine Outback Heritage Museum (Catherine)
- Chung Wah Society Inc. (Darwin) (for Chinese heritage; volunteer-run)
- Northern Territory Police Museum (Darwin)
- Strehlow Research Centre (Alice Springs)

- National Pioneer Women's Hall of Fame (Alice Springs)

#### **Queensland**

- Queensland Museum
- Calliope River Historical Village (Gladstone)
- North Burnett Regional Council (incl. Mundubbera Art Gallery (Gayndah)
- Cairns Regional Gallery (Cairns)
- Tableland Regional Gallery (Atherton)
- Brisbane Botanic Gardens (Mt Coot-Tha)
- University of Queensland Art Museum (UQ)
- University of Technology Art Museum (QUT)
- University of Queensland Anthropology Museum (School of Social Sciences, UQ)
- Yugambeh Museum, Language and Heritage Resource Centre (Indigenous museum project – Yugambeh is south of Brisbane area); ("Marvellous Regional Museums" - Indigenous Cultural Centre/ Keeping Place category winner 2008)

#### **South Australia**

- Architecture Museum, University of South Australia
- Art Gallery of South Australia
- Army Museum of South Australia (Keswick)
- Flinders University Art Museum
- Mary McKillop Penola Centre (Penola)
- Olive Wood, Renmark

#### **Tasmania**

- Levensdale and Woodsdale History Room (Orford)
- Devonport Regional Gallery (Devonport)
- Beaconsfield Mine and Heritage Centre (Beaconsfield)

#### **Victoria**

- Zoos Victoria (Melbourne)
- Museum Victoria (Melbourne)
- Latrobe Regional Gallery (Morwell)
- Sovereign Hill (Ballarat)
- Insectarium of Victoria (Mt Macedon)
- Swan Hill Regional Art Gallery (Swan Hill)
- Golden Dragon Museum (Bendigo)
- Bendigo Art Gallery (Bendigo)
- Ararat Regional Gallery (Ararat)
- Parks Victoria
- Royal Botanic Gardens Melbourne Library
- Monash University Museum of Art (Clayton)

#### **Western Australia**

- Broome Historical Society (Broome) (Volunteer-run)
- Museum of Natural History (Guildford, WA)
- Geraldton Art Gallery (Geraldton)
- Ongerup and Needilup District Museum, Ongerup (north of Albany)
- Carnamah Historical Society (300 km north of Perth)
- Kodja Place and Visitors Centre, Kojanup, (ABC RN "Marvellous Regional Museums" National Winner (all categories), 2008)

[Above are selected examples of institutional members, chosen to indicate the range of institutions, from large to smallest, and indicating the great geographical spread of representation nationally]