

Submission to

House of Representatives Standing Committee on Infrastructure and Communications:

INQUIRY INTO ROLE AND POTENTIAL OF THE NATIONAL BROADBAND NETWORK (NBN)

25 February 2011

The following submission is provided by:

Dr Meredith Foley

Executive Officer, Council of Australasian Museum Directors

c/o Australian National Maritime Museum

PO Box GPO 5131

Sydney NSW 2001

Ph: 02 9412 4256

Mobile: 0438 890 902

Email: mfolwil@bigpond.net.au

On behalf of the Council of Australasian Museum Directors.

Mody

.....

Acknowledgements

The following submission has been prepared by Mr Darren Peacock, Director, Sweet Technology – Digital Strategy and Projects, Adelaide and Dr Meredith Foley, Executive Officer, Council of Australasian Museum Directors.

INTRODUCTION

Australia's major public museums constitute important cultural and research infrastructure that makes a significant contribution to the economic and social life of the nation. Governments at all levels make a substantial investment in the delivery of these public museum services. The National Broadband Network (NBN) provides a unique opportunity to make that investment more effective in reaching and engaging all Australians regardless of where they live.

The potential of the digital environment was recognised relatively early by Australia's major museums; with most museums able to exhibit less than 3% of their collections at any one time, the value of online access was quickly apparent. The internet also offered unprecedented opportunities to engage audiences in new ways on a variety of significant issues. By 2009-10, while over 14 million physical visits were made to major museums, almost three times as many visits were made to the websites of these museums! In response to this interest, Australia's major museums invested enthusiastically in online sites, programs and tools.

The NBN holds the potential to dramatically increase the ability of these online programs to reach and engage new audiences. It holds the seeds for a new paradigm through which Australians will experience their shared histories and identities. It also promises a far greater engagement in knowledge-based discussions and 'citizen researcher' projects. For the first time since the advent of public internet services, it will be possible to engage and connect all Australians through rich media content and interactive, participative experiences. The social, educational and economic benefits of government investment in museum services will be significantly enhanced as museum collections and expertise are made available in new, responsive ways, unencumbered by the constraints of bandwidth and geography.

Education is one of the key areas that stands to gain from the NBN, both in terms of the content that is available to teachers and students in classrooms, but more importantly, through enabling new social forms of learning by bridging the gap between the classroom and the world. Museums are already adept at providing online content and learning opportunities. The NBN makes possible new kinds of learning experiences and new relationships between teachers, students and the knowledge and expertise of museum institutions and professionals.

In addition to benefits in education, the NBN will further enhance the contribution of museum services to social, tourism, regional development and scientific outcomes. In rural Australia, thousands of small museums play a significant social and economic role. The work of those

_

¹ Data collected as part of the CAMD Annual Survey of members, 2009-10.

organisations and that of the larger public museums that support them will benefit from the efficiency and productivity gains made through shared services, cloud computing and online collaboration and communication enabled by the NBN. Through the means provided by online

platforms such as the Atlas of Living Australia many more Australians can contribute to scientific

observation in their capacity as 'citizen scientists'.

Last year's print and television advertising campaign for the NBN featured a classroom where a window becomes a doorway into the 'European Space Museum', highlighting the easy access to museums made possible by NBN connectivity. While not discounting the importance of the role the NBN will play in providing access to international sites, CAMD would also stress the potential for the NBN to provide a gateway into Australian museum sites where Australian staff can deliver information and opportunities for interactive engagement tailored to the needs of Australian school students. Australian museums remain the best place to create rich, relevant and meaningful experiences for Australian students that are strongly embedded in Australian curriculum requirements and assist in enriching Australians' interactions with their own cultural heritage. These same institutions also provide online information which fosters a greater understanding of, and engagement in, key issues in the environment and other sciences. They also present a significant opportunity to project Australia's history, culture and environment to the world.

CAMD

CAMD brings together the Directors and Chief Executive Officers of the major national, state and regional museums in Australia and New Zealand (see appendix I for a list of member institutions and sites). CAMD is the peak body representing the leaders of major museums in Australia and it routinely fosters collaboration between members and with other academic and museum sector bodies, including Museums Australia, on significant digitisation projects.

Australia's major museums occupy a unique position in relation to the generation and diffusion of knowledge in our society. Their core strength lies in their deep collections (including over 55 million objects) which cover all subject areas and media including those objects 'born digital'. By researching and interpreting this material on behalf of the nation, museums add immeasurably to our knowledge of the social and natural world around us.

Museums are also a trusted source of information on contested issues. They bring together a multitude of viewpoints on significant issues, interpreting complex science, promoting community understanding and engaging online users in the search for solutions.

CAMD welcomes the roll out of the National Broadband Network and commends its ability to ensure that the benefits provided by online museum activities can be extended across the country regardless of geographic boundaries.

Responses to the Terms of Reference

CAMD's submission directly addresses six of the Committee's Terms of Reference (A, C, D, E, G, H shown in bold below).

- A. The delivery of government services and programs;
- B. Achieving health outcomes;
- C. Improving the educational resources and training available for teachers and students;
- D. The management of Australia's built and natural resources and environmental sustainability;
- E. Impacting regional economic growth and employment opportunities;
- F. Impacting business efficiencies and revenues, particularly for small and medium business, and Australia's export market;
- G. Interaction with research and development and related innovation investments;
- H. Facilitating community and social benefits;
- I. The optimal capacity and technological requirements of a network to deliver these outcomes.

The following comments are structured according to the order of the Terms of Reference.

A. THE DELIVERY OF GOVERNMENT SERVICES AND PROGRAMS

Australia's major public museums receive significant funding from the Commonwealth, State and Territory Governments to collect, preserve and present the nation's natural, social and cultural histories and heritage. Total investment in museum services and programs across all levels of governments and more than 1,100 public museums was \$657m in 2007/08 (ABS: 2009). The current return on this investment includes the more than 14 million physical visits made to major museums each year and the more than 40 million visits made online, as well as the ongoing preservation and development of the nation's scientific and historic collections, and significant research outputs in the natural and social sciences.

As important as access to knowledge is the need to engage with, as well as inform, museum users. The provision of avenues for this engagement has emerged as a key issue in sustaining the relevance

of museums to their communities. The rollout of the NBN holds the potential for this engagement to be dramatically expanded and enhanced.

The National Broadband Network (NBN) is a landmark opportunity to extend the reach and impact of the investment in museums by connecting more people to Australia's museum infrastructure in ways which support education, social inclusion and cultural exchange. The high speed connectivity enabled by the NBN offers a new framework for the museum experience of all Australians, enabling more extensive and intensive interactions between Australians and their publicly funded museums, wherever they live. New services and experiences, from virtual fieldwork on archaeological sites to interactive video events and social learning projects are made possible by the unprecedented opportunities for connection and exchange opened up by the NBN.

Museum activities are already well recognised in terms of their direct and indirect contribution to the delivery of education services and programs. Close to 1.5 million children of school age visited a major museum in 2009-10. Digital content from museum collections is an integral part of classroom experiences where students have ready access to the Internet. Similarly, museums contribute to lifelong learning for adults through lectures, tours and other public programs. The NBN will significantly enhance the educational outcomes able to be delivered by Australian museums through easier access, curriculum innovation and the adoption of 'Learning 2.0' strategies in the classroom.

Higher education is also a significant area of government activity that works with and benefits from the activities of Australian museums. There are a large number of research collaborations undertaken between museums and academic researchers, typically with Australian Research Council funding. While there are already high speed connections between some universities and museums organisations, the NBN will further enhance research collaboration and exchange between museums and universities nationally and internationally.

Less well known are the contributions of museums to the delivery of other Government service programs for early childhood, the aged and disabled and to tourism and regional development. Through partnerships and project funding museums deliver services on behalf of and in collaboration with government programs and services in these areas both at the Commonwealth and State and Territory levels. These services too will be enhanced by the potential of the NBN to improve efficiency, productivity and innovation.

C: IMPROVING THE EDUCATIONAL RESOURCES AND TRAINING AVAILABLE FOR TEACHERS AND STUDENTS

Digital technologies offer many new ways to support educational service delivery. For two decades all Australian government jurisdictions have made substantial investments in digital tools and content and more recently in hardware and broadband infrastructure to support school learners and education professionals. While each of these investments is essential, the critical shift required for a digital education revolution is in the teaching practice in schools and in the learning experiences of students. A 2008 report commissioned on behalf of MCEETYA², for the COAG³ Productivity Agenda Working Group observed:

"While there has been a significant investment in educational technologies over the last decade, only a minority [of teachers and students] are currently reaping the benefits of the digital revolution."

We also know that students in non-metropolitan areas are amongst those least likely to be reaping those benefits, as they have less access and fewer opportunities to participate in digital culture and learning activities than their metropolitan peers. As the Glasson Regional Telecommunications Review Committee (2008) observed, there is widespread concern about differential access to digital learning opportunities:

"Broadband internet is a fundamental tool in the delivery of education today. A high level of connectivity is important for regional education applications such as remote two-way visual and audio learning. We are concerned that schools in more rural and remote communities will not have the same access to educational opportunities as other schools."

As digital information and communications technologies rapidly change, there is a significant risk that non-metropolitan areas will be left further behind both in access and in developing the skills to make effective use of new technologies and applications, including those made available through museums. The roll out of the NBN promises to even up access to broadband, establishing a level-playing field of access for all Australians. In order to make the best use of this new infrastructure in education we need to prepare our school communities and transform education practice to enable all Australians to benefit equally from participation in the digital economy. In particular we can do that by innovation in school education delivery.

² Predecessor body to MCEECDYA. (Ministerial Council for Education, Early Childhood Development and Youth Affairs.)

³ Council of Australian Governments.

For generations, museums have played a valuable role in schools education. The traditional school museum excursion has enhanced classroom routine and provided opportunities for new learning experiences for students and teachers alike. Museums take a keen interest in supporting effective pedagogy in the exhibits, experiences and activities that they offer their school visitors. Just as education in schools is undergoing a digital revolution, the school museum visit has also changed into something richer and more interactive and which extends beyond the physical into virtual spaces.

In 2008-09 CAMD supported *The Museum and Education Digital Content Exchange* which involved participation from The Le@rning Federation (TLF), Museum Victoria, the National Museum of Australia and Powerhouse Museum. The project investigated efficiencies in selecting, quality assuring and distributing digital curriculum resources from museums to teachers and students in an online learning environment. It also investigated appropriate teaching and learning strategies.

The project enabled students and teachers to share comments and cooperatively plan their learning online. They were also able to pull out material they wanted from the collection content in order to make their own projects. In school trials, over 92% of teachers agreed that the online learning environment and its collaborative tools assisted student learning. Teachers also commented on their preference for trusted, authoritative sources, such as museums, for education purposes. This type of online teaching platform is being specifically designed to support the National Curriculum and populate the broadband with high quality Australian material.

The stated aim of the Australian Government's *Digital Education Revolution* (DER) is to contribute sustainable and meaningful change to teaching and learning in Australian schools that will prepare students for further education, training and to live and work in a digital world. The advent of participative Web 2.0 technologies and the emergence of the millennial 'digital natives' mean that our models of knowledge and learning have to change. School educators face similar issues in designing new learning models and tools that make use of the collaborative potential of interactive web technologies and the rich media potential of high speed networked connectivity. Museums are adjusting their own models of education and online services through the use of webcasting, social networking platforms and mobile applications and services. The NBN will increase the opportunity and demand for these types of education delivery.

Australian Curriculum initiative

In 2008 all Australian governments agreed that a quality education for young Australians is critical to maintaining Australia's productivity and quality of life. They agreed that a national curriculum would

play a key role in delivering quality education and committed to the development of a K-I2 national curriculum, initially in the areas of English, mathematics, science and history.

CAMD believes that the NBN will play a critical role in supporting the implementation of the new Australian Curriculum particularly in the Phase I subject areas of History and Science, The new History curriculum places particular emphasis on student access to local and community history as a basis for achieving understanding of key Australian and international developments. Museums have already begun to generate this unique content.

To provide just one example, Museum Victoria is part of a State Cultural Network which links via broadband to Victoria's key cultural organisations including the Australian Centre for the Moving Image, National Gallery of Victoria, State Library of Victoria and the Arts Centre through the *Culture Victoria* website. The Network is directly connected to 1,700 state schools which are able to access rich broadband content in a series of stories and projects, many created for the site⁴.

Other museums are exploiting the use of wikis to link regional and remote communities to online collections and allow multiple users to contribute as part of a collaborative approach to compiling and improving the knowledge of local history and making it accessible to the world⁵. Others are working with academics to create online Atlases which will draw on a variety of disciplines and sources (including collection objects, historical maps, authoritative text, graphics, literature, poems, songs, oral history and eyewitness accounts.) and allow students and others in the community to create a personalised pathway through their local and State history⁶.

The national science curriculum "seeks to play an important role in fostering the early development of our future scientists and people in science-related industries, as well as developing the science capabilities of its citizens." Australia's major museums have developed a wide range of online science sites for students; the NBN facilitates the next stage in the digital content revolution in schools by providing tools for students to create, share and collaborate with digital resources, not simply to access digital content. It brings the models of citizen science and community history, enabled by Web 2.0 technologies, into classroom practice and directly serves the Australian Government's Education Reform Agenda.

9

⁴ See: http://www.arts.vic.gov.au/Arts in Victoria/Collections/Culture Victoria

⁵ For example, see the Mallala wiki outlined in http://www.collectionscouncil.com.au/media+room.aspx?DMXModule=543&EntryId=1940&Command=Core_Download

⁶ For example, see the Queensland Atlas at http://www.uq.edu.au/ghatlas/

D: MANAGEMENT OF AUSTRALIA'S BUILT AND NATURAL RESOURCES AND ENVIRONMENTAL SUSTAINABILITY

Together, CAMD's museums hold over 55 million museum specimens and cultural, heritage and technological objects which are records through time and space of the past and important predictive tools for the future. These collections provide a rich resource base for research of national and indeed international significance in all fields of knowledge. In the biodiversity field, museum collections constitute an essential part of Australia's future as they provide the raw material through which researchers can discover the extent and character of biological diversity and how it may be sustained in the future.

The taxonomic, pure and applied research carried out in Australia's national history museums informs museum exhibitions and public programs on issues of national and global importance including environmental sustainability, climate change, biodiversity, resource management, and biosecurity.

Museums have been experimenting with innovative media to provide access to biodiversity collections. Programs such as the *Atlas of Living Australia*, which was initiated by CAMD and is now undertaken jointly with the CSIRO, has been funded as part of the Super Science Initiative. The ALA provides single portal access to researchers here and overseas to biological information which will support decision making on biosecurity, global change management and conservation, and underpin research in these areas. More recently, it has introduced flexible web-based software to support the extension of citizen science activities to enable a wide range of people to contribute data, information and knowledge about Australia's biodiversity online7.

The information contained in biodiversity collections provides an important knowledge baseline not only for the ALA and its applications but for a range of applied studies and projects including those in the fields of genomics; evolutionary biology; disease modelling; resource management; bioprospecting and biosecurity amongst others⁸.

The NBN will ensure a far greater online audience within Australia utilising and building on these resources to tackle some of the biggest environmental issues facing the nation.

⁷ See http://www.ala.org.au/about/program-of-projects/citizen-science/

⁸ For example see Museum Victoria contribution to the online Pests and Diseases Image Library on http://www.padil.gov.au/aboutOverview.aspx and the online interactive Woodside Collection of marine species from the Dampier Archipelago which not only facilitates sound environmental management but is linked directly to the WA school curriculum.

E: IMPACTING REGIONAL ECONOMIC GROWTH AND EMPLOYMENT OPPORTUNITIES

There are over one thousand small, typically volunteer-run, museums in Australia. Many of these are currently isolated by limited digital access. The larger government-funded institutions represented by CAMD play an important role in supporting the not-for-profit museum organisations through funding, training and support programs. We believe those organisations, often located in small regional and rural communities will benefit significantly from greater access to new training, tools and support made available through high-speed connections and 'cloud' services storage made possible by the NBN. Not only will these small, usually volunteer run museums benefit directly from high speed access to the Internet but a range of new services to support their activities and increase efficiency and digital literacy will be possible.

Online resources also play an important part in growing regional tourism. In their 2009 *Snapshots: Cultural and Heritage Tourism in Australia* Tourism Research Australia reported that the two most popular activities undertaken by tourists (both international and domestic) are "visiting heritage buildings sites and monuments" and "visiting museums and art galleries". These types of tourists account for more than 150 million visitor nights in Australia each year and contribute strongly to regional economic growth and employment opportunities. For example, recent research on Canberra's cultural institutions found that they played a significant role in attracting tourists who spent between \$249-255 million per annum in that city. Similarly, the Sovereign Hill Museum sites generate approximately \$50 million a year for the Ballarat economy.

The NBN will ensure that the growing number of domestic and international cultural tourists will have access to a broad range of resources with which to research and organise their trips online and to subsequently make a contribution to regional economic growth and employment.

G: INTERACTION WITH RESEARCH AND DEVELOPMENT AND RELATED INNOVATION INVESTMENTS

Australia's major museums intersect with the wider public research and innovation agenda in a number of ways. Museum exhibitions and programs, both actual and online, inspire and educate the community by fostering confidence, critical thinking, creativity and problem solving abilities. Museum collections also provide a critical research resource which generates ground-breaking in-house research projects and collaborations with other research agencies and academies, across the

⁹ Brent W. Ritchie and Tracey J. Dickson, 'ACT Attractions: direct visitor expenditure and visitation patterns study', Sustainable Tourism, Cooperative Research Centre.

sciences and humanities, between disciplines and in nationally and globally significant areas such as climate change, biosecurity, biodiversity, cultural identity and resource management. Museums are also an integral part of the creative economy and creative communities, providing inspirational sources, nurturing the development and application of innovative ideas, acting as sites for cutting-edge digital developments and contributing to the energy and inspiration which attracts creative industries, cultural entrepreneurs and innovators to certain cities and centres above others.

This role has been well recognised in Government innovation reports such as *Venturous Australia*, the 2008 Review of the National Innovation System, which identified museums and their collections as key elements of the national research infrastructure. In recent years e-research initiatives such as the *Atlas of Living Australia* have used new ways of working and new tools for creating and sharing science research using digital technology. In 2010 CAMD was funded by the Australian National Data Service (ANDS) program of the Department of Innovation, Industry, Science and Research (DIISR) to develop a *Museum Metadata Exchange* to make museum collection descriptions accessible online and thus to allow humanities and social science researchers to discover collections hitherto below the radar of online academic and generic search engines. The MME Project aims to allow researchers to gain a sense of the full range of resources available in museum collections and to transform their topics and methodology with hitherto hidden perspectives.

The demand for online access to museum collections by researchers continues to grow. Collections are also increasingly recognised as having a high intrinsic value within the creative economy and providing fundamental ingredients to enable innovation and new ways of thinking. Access to and engagement with these collections will be undoubtedly enhanced by the NBN.

H: FACILITATING COMMUNITY AND SOCIAL BENEFITS

Museums act to facilitate community and social benefits in ways too numerous to detail fully in this submission. Three examples, which rely on powerful and high speed online access, may suffice here to demonstrate the envisaged utility of the NBN in amplifying and extending the community work of major museums:

• Collaborating for Indigenous Rights: The National Museum's Collaborating for Indigenous Rights website provides a powerful teaching and learning resource, especially for secondary students in History, Civics and Citizenship, Studies of Society and Environment, Human Society and its Environment, Aboriginal Studies, Media Studies, Cultural Studies and English. It includes primary source documents relating to land rights and civil rights and the landmark

events and decision of the 1970s. The museum has also developed online units of work looking at the referendum and land and civil rights movements;

- Virtual Museum of the Pacific (VMP) Project: The Australian Museum is reconnecting diaspora and creator communities from the Pacific with intangible and material heritage lost in the colonial period. The museum holds about 60,000 ethnographic objects from Melanesia, Polynesia and Micronesia. It works closely with Pacific communities to enhance engagement and access using these collections. This approach has included digitising cultural objects, bringing culturally knowledgeable members from communities to annotate the information linked with the collections, establishing field programs where creator communities can digitally document and preserve their own intangible heritage and, more recently, working to provide a semantically-based web tool which allows easy, intuitive searching for related objects by type and creator community. The VMP project maximises the value of new and existing metadata, publishes the museum's content to the web without expensive, hard-wired programming and promotes forms of cultural revitalisation which underpin community coherence and national stability and development in Australia and Island communities.
- Migration Stories: Similarly, migrant, refugee and diaspora groups experience pride, confidence and a greater sense of belonging to the wider community by presenting their stories in museums. A number of major museums have established online directories which preserve and celebrate the migration experience and new citizenship by allowing an exchange of information and recording of memories which can be shared across the community.

Many museums within CAMD have also embraced the use of online social networking tools. The use of sites like *Facebook* and *Flikr* has now become standard practice; it brings museums into the arena where users conduct their daily social interchanges and allows for immediate feedback, social tagging, the uploading of photographs, letters and documents and, beyond that, public discussion on the issues of the day.

CONCLUSION

The National Broadband Network is a key piece of national infrastructure which will support the future vibrancy of Australia's cultural, social, scientific and economic life. Its acceptance in a country with relatively high education levels and a relatively small, widely dispersed population makes eminent sense. Its introduction provides an opportunity to rethink how Australians connect to the

history and culture of their nation in ways which will support improved educational outcomes, social inclusion, productivity and innovation. It also provides an important platform from which to catalyse, manage and coordinate Australian research and innovation efforts.

The Council of Australasian Museum Directors believes that the opportunities to harness the potential of ubiquitous broadband connectivity are only limited by our imaginations. Clay Shirky, one of the leading analysts of the Internet revolution, argues that the nations which embrace the full possibilities of these technologies for public participation will be rewarded with gains in productivity rivalling those of the Industrial Revolution. As he notes,

"The opportunity before us, individually and collectively, is enormous; what we do with it will be determined by how well we are able to imagine and reward public creativity, participation and sharing"10.

The investment of further Government resources in unlocking Australia's collections online, combined with the high speed connectivity offered by the NBN, will both feed and harness the individual and collective creative potential of Australia's rich human resources.

. .

¹⁰ Shirky, 2010, p. 212



Appendix 1

CAMD Museum Sites

- Auckland War Memorial Museum, Auckland
- Australian Centre for the Moving Image, Melbourne
- Australian National Maritime Museum, Sydney
 - Wharf 7 Maritime Heritage Centre, Sydney
- Australian War Memorial, Canberra
- Australian Museum, Sydney
- Canterbury Museum, Christchurch
- Historic Houses Trust of NSW
 - Elizabeth Bay House, Sydney
 - Elizabeth Farm, Sydney
 - Government House, Sydney
 - Hyde Park Barracks Museum, Sydney
 - Justice & Police Museum, Sydney
 - Meroogal, Nowra
 - Museum of Sydney, Sydney
 - Rose Seidler House, Sydney
 - Rouse Hill Estate, Sydney
 - Susannah Place Museum, Sydney
 - Vaucluse House, Sydney
 - The Mint, Sydney

History SA

- History Trust of South Australia, Adelaide
- National Motor Museum, Birdwood
- South Australian Maritime Museum, Port Adelaide
- Migration Museum, Adelaide

- Queen's Theatre, Adelaide

Museum of New Zealand Te Papa Tongarewa

- Museum of New Zealand Te Papa Tongarewa, Wellington
- Te Papa Tory Street (Research facility & library), Wellington

Museums and Art Galleries of the Northern Territory

- Bullock Point, Darwin
- Fannie Bay Gaol, Darwin
- Lyons Cottage, Darwin
- Australian Pearling Exhibition, Darwin
- Museum of Central Australia, Alice Springs
- Connellan Hangar, Alice Springs
- Kookaburra Memorial, Alice Springs

Museum Victoria

- Melbourne Museum, Melbourne
- Scienceworks Museum, Melbourne
- Immigration Museum, Melbourne
- Royal Exhibition Building, Melbourne
- National Museum of Australia, Canberra
- Questacon The National Science and Technology Centre, Canberra
- Otago Museum and Discovery World, Dunedin

Museum of Applied Arts and Sciences

- Powerhouse Museum
- Sydney Observatory

• Queensland Museum

- Queensland Museum South Bank
- Museum of Tropical Queensland, Townsville
- Cobb & Co Museum, Toowoomba
- Woodworks, the Forestry and Timber Museum, Gympie
- Lands Mapping & Surveying Museum
- The Workshops Rail Museum, Ipswich

Queen Victoria Museum and Art Gallery

- Inveresk
- Royal Park, Launceston
- Scitech Discovery Centre, Perth
- South Australian Museum
 - South Australian Museum, Adelaide

- South Australian Museum Science Centre, Adelaide

• The Sovereign Hill Museums Association

- Sovereign Hill, Ballarat
- Gold Museum, Ballarat
- Narmbool, Elaine

Tasmanian Museum and Art Gallery

- Tasmanian Museum and Art Gallery, Hobart
- Moonah Complex, Hobart
- Tasmanian Herbarium, Hobart
- Rosny Research and Collections Centre, Hobart

• Western Australian Museum

- Western Australian Museum, Perth
- Western Australian Museums Kalgoorlie-Boulder
- Western Australian Museum Albany
- Western Australian Museum Geraldton
- Fremantle History Museum
- Western Australian Maritime Museum, Fremantle
- Western Australian Shipwreck Galleries
- Samson House, Fremantle