



NGĀ TAONGA
SOUND & VISION

TVNZ Archive Collection Report

1 August 2014 – 30 June 2018

Released under the
Official Information Act

Version 4.0

Date: 20 July 2018

Version History

Date	Version	Author	Description of change (including who has had input into the production of this document)
26/06/2018	1.0	Sarah Davy	First Draft
27/06/2018	1.1	Michelle Welch	Formatting for Sarah Davy
9/07/2018	2.0	Sarah Davy	Revised with notes from Rebecca Elvy, Louise McCrone, Jeanette Bullen
18/07/2018	2.1	Michelle Welch	Formatting for Sarah Davy
20/07/2018	3.0	Sarah Davy	Revised with notes from Rebecca Elvy, Steve Russell, James Taylor, Jeanette Bullen
18/09/2018	4.0	Sarah Davy	Revised with notes from Rebecca Elvy and Tania Vincent
24/09/2018	4.1	Michelle Welch	Formatting for Sarah Davy

Contents

Version history.....	2
Contents	2
Executive Summary	3
Background.....	3
Avalon Archive Facility.....	5
Collection Size.....	6
Collection Development	7
Collection Care	8
Digital Preservation	8
TVNZ Equipment	9
Database.....	9
Cataloguing.....	10
Māori Collection Material.....	10
Relationship Management	12
Compliance	12
Funding	13
Reporting	14
Renewal of Agreements	15
Benchmarks for Future Reporting.....	15
Appendix A: Film Digital Preservation Workflow	16
Appendix B: Video Digital Preservation Workflow	19

Executive Summary

On 1 August 2014, Ngā Taonga Sound & Vision was appointed Archive Manager of the former Television New Zealand (TVNZ) Archive Collection (the Archive Collection). The role of Archive Manager was to 'use the Archive Facility and maintain the Archive Collection...providing public access, preservation, maintenance and digitisation services to MCH (the Ministry for Culture and Heritage), subject to various terms and conditions', as well as to maintain a production library service to TVNZ.¹

This report summarises the activity, outputs and associated costs since that time.

At the outset, this arrangement was challenging for Ngā Taonga. It received \$2 million per annum to manage the TVNZ archive collection with limited information as to how that figure was derived and its components. The collection itself was in a mixed state and condition, reflecting its origins as a working production library, without an archival preservation ethos or imperative having been applied to its use and care.

The associated schedule of targets set to digitise and put the collection online, 'subject to funding' was not achievable, because the figure of \$1.9 million for digitisation phased over three years that was discussed during transfer negotiations to cover a completely new service line of digital preservation never materialised.² The targets were founded on a set of unrealistic expectations that Ngā Taonga was in possession of the necessary funding, resourcing, equipment, digital storage and infrastructure at the point of transfer and onwards, to digitally preserve the collection, when this was not the case.

For the first 18 months, even though Ngā Taonga was carrying the majority of costs and activity of the archive, all benefits were accrued to TVNZ because Ngā Taonga was intensively supporting the creation of its Digital Production Library (DPL) throughout that period as well as maintaining cataloguing and service levels for supply to the broadcaster. Once the DPL was established in December 2015, Ngā Taonga was able to set about methodically evaluating, auditing and investing in the collection, gearing up to establish digital preservation infrastructure. This means that not all of the funding Ngā Taonga received was spent explicitly on direct TVNZ archive collection costs. Since the transfer, Ngā Taonga has received \$2 million of funding annually to archive the TVNZ Archive Collection³, but not the former New Zealand Film Archive (NZFA) collection. Consequently there are differential treatments which preference Crown collections, despite the fact that Ngā Taonga has operated under one pan-archive reporting entity and reported to MCH under this common understanding since the transfer. Maintaining three collections separately does not make administrative sense or support good archival practice: a significant amount of RNZ and TVNZ material is also held in the former New Zealand Film Archive (NZFA) collection, and RNZ sound material is processed at Avalon, where it is stored.

The three associated agreements currently in force are unnecessarily complex, unwieldy and require re-negotiation by the three parties (TVNZ, MCH and Ngā Taonga) to ensure a more straightforward arrangement and full consultation with the Crown: this also needs to link to future reporting. Additionally, the Public Records disposal deferral for the TVNZ collection expires in 2019, which requires action now to determine planned outcomes and actions.

From the outset, as Archive Manager, Ngā Taonga expected and expects to be able to do the very best for both the collections and the people of New Zealand, even through its 'public good' ethos does not align smoothly with the commercial imperative of TVNZ. To this end, it has added many elements of great value to the collection, including making its metadata on 400,000 items visible and discoverable online. It is essential that Ngā Taonga receives the support it requires from the Crown to resolve the following issues:

- Negotiation of a new MoU and Service Level Agreement (SLA) that does not compromise the ability of Ngā Taonga to carry out its archival or 'public good' mandates
- Agreement of new targets
- Action by the Department of Internal Affairs (DIA) to achieve separation of services at the Avalon archive facility
- Provision of a licence for Ngā Taonga to occupy the Avalon archive facility, which includes landlord responsibilities.

¹ 'Background' section of 'Transfer of TVNZ Archive Collection and Employees', June 2014.

² 'Maximising Access to New Zealand Online Content: Transfer of TVNZ Archive and Hidden Treasures Digitisation Boost. Executive Summary, pp 1-2, and Section 15, p.4 (n.d.)

³ Ngā Taonga also receives an annual CPI adjusted payment of \$171,000 per annum to provide the TVNZ Production Library Service.

- Resolution of the urgent need to invest in a comprehensive preservation programme of Betacam videotapes at the Avalon archive facility
- Resolution of the issues with the TVNZ archive collection, including formal agreement for Ngā Taonga to provide a degree of non-commercial third-party access to the collection; clarification of the various rights held in the collection; assessment of risk around online access, and associated barriers; deposit of material currently held solely within the TVNZ DPL (currently at risk); and the status of the collection under the Public Records Act
- Support and reinforcement of the ability of Ngā Taonga to serve the interests of the ‘public good’ in both preserving and making the collection accessible to the people of New Zealand without the public having to unduly bear further costs or experience barriers to access posed by the commercial imperative of TVNZ.

At the beginning of its role as Archive Manager, Ngā Taonga did spend most of the transferred \$2m on maintaining the status quo, but this meant there was no ‘headroom’ for conservation, digital preservation, rehousing or any of the other activities associated with best practice audiovisual archiving. It is only in 2016 and 2017 that we have managed to get the costs associated with this collection somewhat reduced, so as to create some capacity for a digital preservation programme to commence. The results of this work are just starting to become available now.

In January 2018 Ngā Taonga digital archive repository became fully operational, and from that date, 816 items have been digitally preserved. Without appropriate resourcing levels, Ngā Taonga cannot deliver a more extensive digital preservation programme. Given that elements of the digital archiving process are now automated, Ngā Taonga requires uninterrupted and secure funding to ensure that the system continues to do this essential work, alongside appropriate staffing levels to carry out the many analogue components of the process. Additional resourcing is also required to improve the infrastructure and capacity of Ngā Taonga to place these preserved items on its online catalogue.

Given the tri-partite nature of the existing agreements, Ngā Taonga will initially need to consult with MCH, as the owner of the collection, to determine its expectations around the nature and structure of revised agreements and its role within the renegotiation process. It will then confirm a renegotiation process with TVNZ, to cover a wide range of areas including the ability to directly provide non-commercial access to the collection by iwi, GLAM⁴ sector organisations and other not-for-profit entities, as per its need to uphold both its reputation and its ‘public good’ ethos which is at the core of its kaupapa. Ngā Taonga believes benchmarks for future reporting should be mutually agreed and reflect all the activities required to manage the collection together across all collections in its entirety. Reporting should be set against its KPIs and each phase of the digital preservation process, so the reporting is expanded to reflect the quantum of work required and not just the ‘end output’, as this could provide perverse incentives, either to focus on shorter titles (at the expense of longer, potentially higher public value titles) or to lower quality outputs: both of which is unacceptable to Ngā Taonga.

Background

This report outlines the work carried out by Ngā Taonga Sound & Vision (Ngā Taonga) as Archive Manager of the former Television New Zealand (TVNZ) Archive Collection (the Archive Collection) since 1 August 2014⁵. It comprises a collection audit, a historical narrative of the management of the collection since it has been in the care of Ngā Taonga (including contractual compliance), a set of benchmarks for future reporting to the Ministry for Culture and Heritage (MCH) and an appendix of descriptions of the processes involved in digital preservation of film and video carriers.

In June 2014, recognising that the TVNZ Archive collection⁶ was of ‘high heritage and cultural value to New Zealand’, and wishing to ensure it was appropriately preserved and made increasingly accessible, the Crown and

⁴ GLAM is an acronym used to describe the cultural sector comprised of galleries, libraries, archives and museums.

⁵ The transfer was enacted with the then New Zealand Film Archive, a charitable trust established in 1981. To better reflect the Archive’s increased mandate the Trust was renamed as The New Zealand Archive of Film, Television and Sound Ngā Taonga Whitiāhua Me Ngā Taonga Kōrero in July 2014. The Trust adopted Ngā Taonga Sound & Vision (Ngā Taonga) as the operating name and for all practical purposes this is how it is known. For ease of reading this report uses ‘Ngā Taonga’ as the entity name throughout.

⁶ The collection was initially estimated to be comprised of ‘over 500,000 items’ (‘Background’ Section A of ‘Transfer of TVNZ Archive Collection and Employees’, June 2014)

TVNZ agreed to ‘transfer title, risk and possession of the physical materials in the [TVNZ] Archive Collection and the Archive Facility’⁷ to the Crown (by and through the Ministry for Culture and Heritage (MCH) and Land Information New Zealand (LINZ) respectively). The facility at Avalon was then to be managed by the Department of Internal Affairs (DIA).

MCH appointed Ngā Taonga as Archive Manager. The eleven TVNZ Archive employees who had previously provided production library services to TVNZ were also transferred to Ngā Taonga. The role of Archive Manager was to ‘use the Archive Facility and maintain the Archive Collection...providing public access, preservation, maintenance and digitisation services to MCH, subject to various terms and conditions’, as well as to maintain a production library service to TVNZ.⁸

These terms and conditions, and the relationship between the parties are currently laid out within and across several agreements. Of these, this report is concerned primarily with two contracts and a memorandum of understanding (MOU).⁹ These contracts were both signed in June 2014, and the collection and employees were formally transferred on 1 August 2014, the designated transfer date. These documents are titled as follows:

1. ‘Transfer of TVNZ Archive Collection and Employees’ (between Ngā Taonga, TVNZ and the Ministry for Culture and Heritage (MCH));
2. ‘Production Library Services Agreement’ (between Ngā Taonga and TVNZ); and
3. ‘MoU between MCH and the New Zealand Archive of Film, Television and Sound Ngā Taonga Whitiāhua Me Ngā Taonga Kōrero for the period 1 August 2014 – 30 June 2017.’¹⁰

The ‘Transfer of TVNZ Archive Collection and Employees’ (Transfer Agreement) covers the transfer of the collection and the existing employees, and included the vesting of the collection in MCH; MCH’s appointment of the Archive Manager; MCH and the Archive Manager’s rights to access the collection database and publish it online; and the process by which MCH and TVNZ would make the collection more accessible. The ‘Production Library Service Agreement’ (PLSA) addresses how the Archive Manager provides the production library service to TVNZ, and supports their objective of creating a digital production library (DPL) in Auckland, as well as ‘providing certain public access, preservation, maintenance and digitisation services to MCH.’ The MOU between Ngā Taonga and the Minister for Arts, Culture and Heritage sets out the responsibilities and accountabilities for each party through a series of outcomes and outputs for film, sound and television archiving, including the management, archiving and increased accessibility of the Archive Collection.

Avalon Archive Facility

The Archive Facility comprises the land and building at 181A Taita Drive, Avalon, Lower Hutt, referred throughout this report as ‘Avalon’. It was built by Hollywood Vaults and the architects known as designgroup stapleton (sic)¹¹ for TVNZ and opened in 2002. Currently the facility is occupied by a team of six technical employees engaged in digital preservation¹² and three employees who undertake client supply and cataloguing as per the PLSA. The facility contains a cold vault for film storage (1285 linear metres of shelving), a general vault for film and tape storage (17285 linear metres), and a documentation vault (270 linear metres). 22 linear metres of shelving in the office area contain the TVNZ Archive Collection Card Index and the extensive reference collection of the New Zealand Listener magazine.

⁷ The Archive Facility is the land and building at 181A Taita Drive, Avalon, Lower Hutt, referred throughout this report as ‘Avalon’.

⁸ All quotes in this paragraph are derived from the ‘Background’ sections of ‘Transfer of TVNZ Archive Collection and Employees’, June 2014.

⁹ The other agreements include those around the purchase of the Archive Facility (Avalon) by LINZ, covered in a separate agreement between LINZ and TVNZ. The ‘MOU – Access to TVNZ Archive Collection’ (31 July 2014) between the Department of Internal Affairs (DIA) and MCH addressed the occupation of the Archive Facility by the Archive Manager to enable it to ‘provide on-going access rights to the Archive Facility to MCH (including vis the Archive Manager) to allow it to access and use the Archive Collection...’ (Section F, p.1)

¹⁰ The 2014-17 MoU was extended without amendment to cover the period 1 July 2017-30 June 2018.

¹¹ Now known as designgroup stapleton elliot (DGSE).

¹² Two of these technical employees are sound archivists preserving the RNZ sound collection.

Archival storage within the main vault at Avalon meets international standards¹³ for magnetic tape storage (15°C/24%RH) while film stored within the main vault now falls outside the standards for film storage (2-4°C/40%RH) as these have been adjusted downwards over the last decade.

Ngā Taonga has successfully upheld its operational responsibilities as Archive Manager in its occupancy of the Avalon facility, as per the 'MOU – Access to TVNZ Archive Collection' (31 July 2014) between MCH and DIA. Throughout its tenure it has communicated to and resolved with DIA issues such as replacement of fittings, the relocation of some non-TVNZ records to Avalon and forward planning for developmental issues including the installation of ultra-fast broadband to facilitate improved collection management and access.

Separation of Services and Avalon Studios

The property management of the Avalon archive facility and Avalon Studios are administered together by DIA because of complex shared infrastructure established when the entire site was owned by TVNZ. In 2014 Ngā Taonga agreed to pay a proportion of the shared property management costs for the Avalon archive facility at a cost of approximately \$285,000 per annum, to cover aspects including building and ground maintenance, utilities and cleaning. This arrangement was intended to be in place for one year, pending a separation of shared services by DIA between the two sites. However, Ngā Taonga has continued to pay this fee every year since 2014 and, to date, has not been able to clarify when DIA will complete the work to relieve this on-going cost by splitting out the infrastructure for the two sites so that accurate property management costs can be determined and negotiated, in spite of DIA receiving \$2.4 million in capital funding in Budget 2014 to complete this work. It appears that this is a low priority for DIA, as reflected in the low levels of value, service and engagement received around improvements and maintenance to the Avalon archive facility to date. Ngā Taonga is therefore seeking the provision of a licence to occupy Avalon which includes landlord responsibilities.

¹³ Standards from the Image Permanence Institute (IPI) and the International Association of Sound and Audiovisual Archives (IASA)

Collection Size

Ngā Taonga has undertaken a collection audit of physical objects, which for the first time, ensures an accurate count of the numbers of items held at Avalon. All film reels, tapes, discs and file cards were counted individually, while photographs were estimated based on a count by box, and documents counted by file box.

Media	Unit	No. of Items
Film elements (both picture and sound (magnetic and optical))	Reels	166,876
Videotape	Tapes	177,229
Optical Discs (DVDs)	Discs	19,611
Photographs (prints, negatives and transparencies)	Images	51,985 ¹⁴
Documents	File Boxes	1,927
Card Index	File Cards	130,544
Total Items		548,172

Collection Development

For the first 18 months, even though Ngā Taonga was carrying the majority of costs and activity of the archive, all benefits were accrued to TVNZ because Ngā Taonga was intensively supporting the creation of their Digital Production Library (DPL) throughout that period as well as maintaining cataloguing and service levels for supply to the broadcaster. The DPL was established in December 2015. Prior to this, Ngā Taonga facilitated the loan of around 6,550 tapes from the Archive Collection back to TVNZ so they could be digitised for the DPL, as per the Transfer Agreement and the PLSA. The digitised copies of these tapes and other TVNZ programmes made after this date are stored solely in the DPL. Although the PLSA allows for Ngā Taonga to receive and store any TVNZ programming made and broadcast after the collection transfer date and sent to Avalon by TVNZ, this has not eventuated in significant quantity. This is due in part to the DPL being considered by TVNZ as their primary repository for these works (which is separate and supports their commercial imperative), and because the digital format used by TVNZ for the DPL is different to the uncompressed archival type used by Ngā Taonga as its preservation format. Currently the TVNZ Archive Collection at Avalon is effectively bookended from the inception of the collection to the date of the establishment of the DPL, the keeping-place of the contemporary element of the TVNZ collection. The entire TVNZ collection is therefore divided between the two repositories, the DPL in Auckland, and the Avalon facility. The Transfer Agreement allows for reciprocal exchange of digital copies of material that both parties have digitised since the transfer date, and Ngā Taonga would expect to be able to archive the whole collection. In order to fulfil its contractual obligations under the contract for archiving Māori broadcast material, Ngā Taonga has received copies of series funded by Te Māngai Pāho, such as Te Kaea, Marae and Waka Huia from TVNZ and commissioned producers. Ngā Taonga also supplies digitised material to TVNZ on demand as part of TVNZ's on-going production requirements, including some material previously supplied for ingest into the DPL that required correction.

The Transfer Agreement sets out the way that the collection is to be managed under the Public Records Act (2005). It required TVNZ to receive the authority of the Chief Archivist for Disposal of the Archive Collection to MCH in 2014. Any subsequent deposits of items into the collection by TVNZ also fall under this directive, and Ngā Taonga is currently working with the Chief Archivist and MCH over the transfer and deposit of a significant collection of legacy broadcast material from the Television Centre in Auckland to Avalon. The Public Records disposal deferral for the TVNZ collection expires in 2019.

As Archive Manager Ngā Taonga has added value to the collection through the following actions:

- Auditing the collection, including the documentation and stills collection that was uncatalogued and not included in transfer inventories.
- Transferring the data from TVNZ's obsolete Basis database to a Filemaker database to ensure it remained accessible.
- Making the collection visible and discoverable through placing the metadata of 400,000 collection items online.

¹⁴ Number of images estimated through an average count by box.

- Making the collection available through fulfilling approximately 1,110 requests annually.
- Ongoing preservation activity, including undertaking hundreds of hours of specialist re-housing and remedial conservation work on analogue carriers.
- Digitally preserving the metadata within the TVNZ card index system.
- Identifying uncatalogued audiovisual items not held on the database, which are now recorded.
- Developing a workflow to provide access to the stills collection.
- Maintaining and developing the TVNZ's collection of *Listener* magazines to ensure a definitive set of this valuable primary resource of broadcasting history.

Collection Care

Ngā Taonga has implemented a conservation programme at Avalon to ensure all items for digital preservation are able to be cleaned, repaired and re-housed in suitable enclosures. Reflecting its origins as a working production library, the storage of film material at Avalon was historically poor with material generally shelved in vertical orientation on reels (archival processes require horizontal storage and the film wound on film cores). Some items have been found to be packed en masse into non-archival cardboard boxes (as opposed to film cans) or not in a container at all. This storage has resulted in distortion of the film's form, and separation of films from their cores (vital for support when handling). Some of the metal film cans have been found to be very rusty and posed a breathing hazard when handled. Ngā Taonga has therefore begun to replace these with archival plastic cans. Such conservation measures are both resource and time-intensive, also requiring employees with specialist skills to undertake the work, which extends to the collection of documentation and stills. This work is essential, requiring much remedial work and additional resources, to maintaining the long-term survival of the collection.

Digital Preservation

The MOU expected Ngā Taonga to copy the TVNZ Archive collection for preservation purposes in accordance with the Copyright Act 1994, storing and maintaining it on behalf of the Crown. It was also expected to digitally preserve the TVNZ Archive Collection for the purposes of making it available on its online catalogue. The following schedule of targets was set in 2014, 'subject to funding':

	2014/15	2015/16	2016/17	2017/18
Items digitised	1,000	3,000	3,000	3,000
Items online	500	2,000	3,000	4,000

From the outset, none of these targets were achievable. This is because they were founded on unrealistic expectations that Ngā Taonga was in possession of the necessary funding, resourcing, equipment, digital storage and infrastructure at the point of transfer and onwards, when this was not the case. A figure of \$1.9 million, to be allocated over three years and dedicated to digitisation, was discussed at the time of transfer negotiations but never eventuated.¹⁵

The archival process of *digital preservation* is not simply making digital copies of collection items: that activity is more accurately termed *digitisation*. In contrast, digital preservation is a complex and resource intensive activity. See Appendices A and B for a breakdown of the workflow for film and video digital preservation that involves specialist selection, repair, handling, transfer, storage, migration and record management within a suitable repository capable of managing the resultant metadata.

The clock is counting down for over 100,000 Betacam format tapes in the TVNZ collection. With more than 200,000 programmes stored on these broadcast tapes the machinery to play them pack is now in very short supply worldwide. Around the globe, governments, archives and broadcasters are buying up the services of the owners of the remaining videotape playback machines. It is estimated that there is less than 20% of machines available for the quantities of videotapes stored in recognised affiliated archives and no more will be made. Unless a strong commitment in the form of a dedicated project to digitally preserve the contents of these tapes is undertaken in the next 3 – 4 years the majority of this taxpayer funded programming will remain inaccessible.

¹⁵ 'Maximising Access to New Zealand Online Content: Transfer of TVNZ Archive and *Hidden Treasures* Digitisation Boost. Executive Summary, pp 1-2, and Section 15, p.4 (n.d.)

While Ngā Taonga received a plethora of videotape transfer equipment¹⁶ as part of the 2014 transfer, this equipment had largely reached the end of its working life and was in need of major investment in repair or replacement. To date, Ngā Taonga has not been resourced to do this. It was not until 2016 that Ngā Taonga was able to procure additional high-cost items such as a digital film scanner and a digital archive repository in order to complete the digital preservation infrastructure. This new set-up required over a year of testing and establishing appropriate digital standards, workflows and documentation alongside upholding the means and levels of access required by PLSA for TVNZ.

In January 2018 the digital archive repository became fully operational, and from that date, 816 items have been digitally preserved. Without appropriate resourcing levels, Ngā Taonga cannot commit to a more extensive digital preservation programme. Given that elements of the digital archiving process (such as checking and migration) are now automated, Ngā Taonga requires uninterrupted and secure funding to ensure that this system continues to do this essential work, alongside correct staffing levels to carry out the many analogue components of the process.

The Archive's resultant ability to place these preserved items on its online catalogue is heavily dependent on workflow and infrastructure improvements (requiring additional resourcing) that have yet to be put in place. These include a major consolidation/replacement of the three database systems, development of an automated digital asset retrieval system, ongoing investment in storage system expansion, alongside network and broadband upgrades. Ngā Taonga is also bound by the terms and conditions of the Transfer document with regard to streaming material from the Archive Collection. Ngā Taonga is not at liberty to place all digitally preserved items online; it must contractually take into account the date of the material and seek additional third-party rights clearance where required. TVNZ may also choose to withhold permission if the material is deemed to hold ongoing commercial value.

TVNZ Equipment

As detailed in the Transfer Agreement, Ngā Taonga received an extensive collection of videotape transfer equipment in 2014, to use 'for the purpose of providing the preservation, maintenance and digitisation services' outlined in the agreements¹⁷ In addition, in 2017, TVNZ loaned Ngā Taonga six digital Betacam players which were subsequently found to require replacement heads which would have cost Ngā Taonga \$10-15,000 to refurbish (if the necessary parts could be found). This example of how the maintenance of obsolete technology has significant financial ramifications is salient in terms of future resourcing to enable all formats within the TVNZ Archive Collection to be preserved. Ngā Taonga has also added other equipment including a ScanStation (film scanner) and a fitted specialist ventilation system to enable Health and Safety obligations to be upheld for employees repairing film at Avalon. Ngā Taonga now requires an active disposal policy to be agreed that will allow it to dispose of equipment that is beyond its useful life.

Database

The TVNZ iteration of the Archive Collection database was not included in the transfer of the Archive collection from TVNZ to MCH. Ngā Taonga upheld the right of TVNZ to handle, use and modify the contents of this database, including managing and administering it. Both parties acknowledged it was coming to the end of its useful life, and maintained the data and its infrastructure until advised by TVNZ that they had migrated the data into their DPL, at which point it was technically retired, and the two networks separated. Ngā Taonga then migrated the data into a stand-alone database compatible with its existing system.

In June 2014, MCH engaged a contractor to produce an independent assessment of the capability of Ngā Taonga to manage the TVNZ archive collection records in a manner that met the requirements of the Public Records Act and the associated mandatory standard issued under the Act, the Records Management Standard for the Public Sector. This report¹⁸ was subsequently described by MCH as 'really positive...and clearly shows Ngā Taonga have good business practices in place'.

¹⁶ See Schedule 2 of the Transfer Agreement for the full list of equipment received by Ngā Taonga in 2014.

¹⁷ Transfer Agreement Clause 12.

¹⁸ Davanti Consulting: 'Ministry for Culture and Heritage. TVNZ Archive Collection Records Management Assessment' (5 August 2014)

From the transfer date, Ngā Taonga also ensured that the Archive Collection was stored in its current vault position and shelf location to support subsequent retrieval and access and ensuring that expected levels of responsiveness, accuracy, efficiency and effectiveness required by the PLSA were not compromised. Ngā Taonga sought and received TVNZ permission to reconfigure the contents of the vault in 2017 to maximise storage to include non-TVNZ collections. All elements of the collection remain fully retrievable. As per the PLSA, Ngā Taonga did not “change, alter, remove or destroy any information in the TVNZ Card Index System or other manual Archive Collection records”, and continues to provide TVNZ access to these resources as required. In June 2015 Ngā Taonga digitised the 130,544 components of the TVNZ Card Index System at a cost of \$121,385. Ngā Taonga provides TVNZ with access to the updated Ngā Taonga television collection database, as well as information from the Card Catalogue on an ongoing basis as requested.

As per the Transfer Agreement and the MOU, the Crown granted a right to Ngā Taonga to publish the contents of the TVNZ database online in order to make it searchable by the public. This metadata was not to include ‘the detailed shot logging information that supports the TVNZ production library function, but does permit the inclusion of a precis of each title’. Ngā Taonga did not have the resources or the digital infrastructure in place to exercise this right until 2018 when the TVNZ Collection Online project was established to enable its website to link to the database so that the metadata of 400,000 titles can be available on its online catalogue by August of that year.

Cataloguing

Cataloguing, defined in the MOU as ‘recording descriptive information about the TVNZ Archive Collection onto a database’ has continued since the transfer date. Ngā Taonga undertook an intensive programme of cataloguing the large volume of works entering the DPL up to December 2015. Cataloguing activity remains an integral element of the work of the team of employees engaged in providing access to the collection at Avalon. It currently catalogues approximately 270 titles per year.

Māori Collection Material

The importance of the consideration of significant Māori material within the TVNZ Archive Collection is outlined in the MOU, ensuring Ngā Taonga upholds its obligations under its Constitution and Kaupapa and enables the provision of relevant information about collection material to whanau, hapu and iwi as part of its development of kaitiakitanga and access procedures. Although no information about any kaitiaki connections to the TVNZ Archive Collection was transferred with the collection (partially because of the loss of corporate memory following 2014 disbanding of the TVNZ Māori unit), Ngā Taonga has been working to ensure information on the TVNZ Archive Collections is supplied to whanau, iwi and hapu through the creation of pan-archive inventories, and liaison with its existing kaitiaki networks. Ngā Taonga is also advocating to be able to support these groups to have access to this collection alongside other non-commercial entities on a cost-recovery basis, outside the licencing structure of TVNZ.

As per the Transfer Agreement, Ngā Taonga supports Māori Television broadcasters wishing to make programmes to promote Māori language and culture for broadcast on Māori Television, by providing access to Māori material held within the TVNZ Archive Collection on a cost-recovery basis.

Access

Access by TVNZ

In line with the PLSA, Ngā Taonga met all TVNZ requests to access Archive Collection works, for an annual Production Library Service Fee of \$171,000.¹⁹ The PLSA covers four categories of access by TVNZ, all involving research, retrieval, technical work, administration and logistics:

- TVNZ News & Current Affairs (e.g. *Breakfast*, *Midday*, *Te Karere*, *One News at 6*, *Seven Sharp*, *One News Tonight*, *Sunday, Fair Go*, *Q+A*, *One News* on-line).

¹⁹ The Production Library Service fee was initially set at \$419,000 + GST from 1 July- 31 December 2015, until the cessation of cataloguing services for the DPL. Thereafter it was set at \$171,000 + GST, with an annual CPI adjustment. This covers all access by TVNZ with the exception of some technical services charges made to production companies.

- TVNZ non-News & Current Affairs (e.g. *Country Calendar*, non-broadcast uses such as publicity, legal, etc.).
- Commissioned programmes made by third parties for TVNZ broadcast (e.g. *Coast NZ*, *Marae*, *What Now*, *Waka Huia*, *Tagata Pasifika*).
- Licensing (previously under instruction from TVNZ Licensing, now through the DPL as a result of the licensing partnership between TVNZ and Getty Images, from April 2018) – for broadcast or any other use not on TVNZ, Maori TV or NZ On Screen.

Ngā Taonga refers all licencing requests to TVNZ. It has consistently met or exceeded the timeframes for delivery set out in the PLSA: same day for News and Current Affairs; within the hour for urgent requests; two working days for TVNZ licencing requests for commercial footage sales (with a response to these within two hours); and three working days for TVNZ production, commissioned programmes and all other TVNZ requests not otherwise described. Ngā Taonga also maintains an on-call service for TVNZ news requests on weekends, after hours, and on statutory holidays. In 2017/18, access by TVNZ accounted for 53.5% of all requests for access to this collection.

Ngā Taonga has also upheld its obligation not to prevent or limit the rights of TVNZ to maintain fibre links into the archive facility in perpetuity in order to transfer Archive Collection works to TVNZ sites; and the right to locate technical equipment to operate these links (known as the 'line feed'). Ngā Taonga is currently liaising with TVNZ who are considering updating the currently outdated line feed technology to a digital mode of supply: this will require agreement on resources and bandwidth levels, in addition to an upgraded network capability across Ngā Taonga sites.²⁰ Until the advent of the film scanner and the SAN, the line feed activity has historically had no benefit to Ngā Taonga from a long-term preservation perspective: files made to send to TVNZ were not, until 2017, able to be retained as they were generally not whole copies, nor of sufficient archival quality.

Access by Ngā Taonga

The Transfer agreement provides Ngā Taonga, as Archive Manager, with the same provisions as the Crown in terms of collection re-use. Ngā Taonga makes extensive use of the TVNZ Archive Collection alongside the Sound and Film & Video collections in its internal programming, both on-site in its cinema and accompanied external presentations and online within exhibitions. These include cinema screenings of the iconic *Pounamu* series, produced in 1990 by TVNZ's Māori Programmes department; an online exhibition to mark the 130th anniversary of the birth of Katherine Mansfield, and a Science Fiction cinema season 'Sci-Fi July' in 2018. Ngā Taonga was also successful in ensuring the seminal TVNZ arts series *Kaleidoscope* was inscribed into the UNESCO Memory of the World register in 2017.

Other off-site access by Ngā Taonga is permitted if delivered through a network of stand-alone local terminals known as MediaNet, as per the Transfer Agreement, but the permission of TVNZ is required for any additional forms of audience outreach and engagement, which includes publicity, promotion, and unaccompanied third-party off-site screenings. Ngā Taonga clears all third party rights for each item, as per the Transfer Agreement. In 2017/18, access by Ngā Taonga accounted for 6.5% of all requests for access to this collection.

Access by Third Parties

In line with the requirements of the Transfer Agreement and the PSLA, Ngā Taonga upholds TVNZ's and third party rights in relation to third party requests. In addition to facilitating requests for copies by members of the public (for which TVNZ pre-approval is in place), Ngā Taonga also supports access to the collection by third parties, including Māori Television and NZ on Screen, on a cost-recovery basis. Since the transfer, Ngā Taonga has supplied 348 titles to NZ on Screen from the TVNZ collection, in addition to other TVNZ material supplied from the former Film Archive collection.

Ngā Taonga clears all third party rights for each item, as per the Transfer Agreement. It also provides third-party access to the Parliamentary Television collection, which is stored at Avalon. In 2017/18, access by third parties accounted for 40% of all requests for access to this collection.

²⁰ Ngā Taonga is currently awaiting dates from the service provider to upgrade to Ultra Fast Broadband (UFB) at both Te Anakura and Avalon. At Avalon, this is pending negotiations with DIA and Avalon Studios as to the optimal route for the cable trench over their property.

As per the MOU, Ngā Taonga is working with TVNZ to agree, refine and make consistent the process of handling public and non-for-profit types of requests, for which it is seeking the pre-approved ability to supply material for which TVNZ is the sole copyright holder outside the TVNZ/Getty licencing processes, in the interests of the 'public good' ethos which is at the core of its kaupapa. Ngā Taonga uphold the service delivery times prescribed by the MOU, responding to these requests within three working days of receipt and delivering, where technically possible²¹, within one week of receiving authorisation from TVNZ and/or other rights holders (including kaitiaki).

Public viewing is enabled by Ngā Taonga through its offering of a research viewing service by appointment at Avalon (which may incur a TVNZ charge). TVNZ titles held in the Film & Video collection are available to view in the media library at Te Anakura (the primary Ngā Taonga office in Wellington) which is open 12-4pm Monday through Friday (free of charge). Ngā Taonga is working with TVNZ to make the TVNZ Archive Collection more accessible online, initially through making ten agreed database fields of the database available on its online catalogue. Ngā Taonga will be populating these records with watermarked viewable material as resources for digital preservation, rights and TVNZ permissions allow, as per the conditions set out in the Transfer Agreement and the MOU. These stipulate that TVNZ may grant permission for this online use provided that the material is digitally preserved, fully cleared (if third party rights are involved) and originally broadcast at least three years prior to the date of streaming or, if the material was not broadcast, five years prior. TVNZ may also choose to withhold permission if the material is deemed to hold ongoing commercial value.

The ability of Ngā Taonga to serve the interests of the 'public good' in both preserving and making the collection accessible to the people of New Zealand who supported its creation, without the public having to unduly bear further costs or experience barriers to access posed by the commercial imperative of TVNZ, needs the support of the Crown if this kaupapa is to be upheld.

Relationship Management

Management of the relationship between TVNZ and Ngā Taonga up to and including the point of transfer was the responsibility of the TVNZ Head of Operations and Ngā Taonga Chief Executive. In August 2014, this was then passed to the Head of Partnership, and subsequently on to the Group Manager, Information Services, who has managed the relationship since July 2016 and where it rests currently. In line with the PLSA the two parties continue to meet with each other from time to time, most recently in May 2018, with the Performance Advisor from MCH in attendance. Both parties are working towards a review and renegotiation of the PLSA, during which time production library services have continued to the satisfaction of both parties, as per the requirements around the TVNZ payment of the annual fee for these services. Ngā Taonga has also upheld the requirement to keep MCH and TVNZ notified of any relevant issues arising, including, but not limited to, those that may have an impact on the delivery of services.

Compliance

As above, MCH has set targets for the digital preservation of the TVNZ Archive Collection and subsequent online access. However, as Archive Manager, the ability of Ngā Taonga to meet the online target is in part bound by the terms and conditions of the Transfer Agreement with regard to streaming material from the TVNZ Archive Collection: material which requires digital preservation before this can take place. However Ngā Taonga have never received the resources to meet these targets.

The 'Step In Actions' outlined in the PLSA were not required as no breaches in the agreement were made by Ngā Taonga as the Archive Manager. All parties have upheld the requirements for confidentiality around all aspects of the agreements, conferring and agreeing whenever issues relating to release of relevant material is requested.

Ngā Taonga complies with the Public Records Act (2005) in the management of the TVNZ Archive Collection, exemplified by the report commissioned by MCH in 2014.²²

²¹ Titles requested that are only held on film take longer to digitally preserve than those on video, which require longer delivery times: expectations about this are set at the outset of the query.

²² Davanti Consulting: 'Ministry for Culture and Heritage. TVNZ Archive Collection Records Management Assessment' (5 August 2014)

Funding

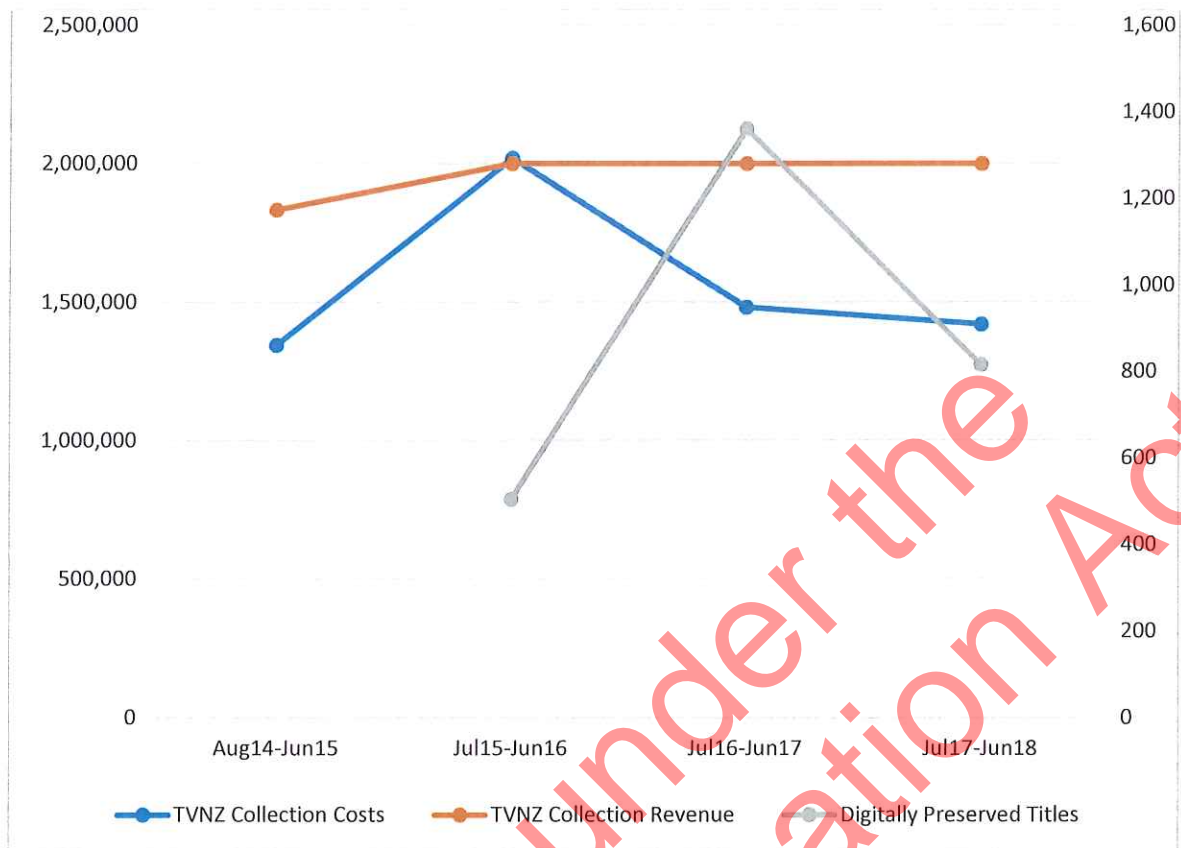
Ngā Taonga has a national remit, and currently receives annual funding for managing all the items it holds. Since the transfer, it has received \$2 million of funding annually to archive the TVNZ Archive Collection²³, but not the former Film Archive collection. Critically, how the figure of \$2 million was arrived at, and its component parts was never made clear to Ngā Taonga. Consequently there are differential treatments which preference Crown collections, despite the fact that Ngā Taonga has operated under one pan-archive reporting entity and reported to MCH under this common understanding since the transfer. Maintaining the three collections separately does not support good archival practice: a significant amount of RNZ and TVNZ material is also held in the former Film Archive collection, and RNZ sound material is processed at Avalon, where it is stored.

The costs of managing the TVNZ Archive collection between 2014 and 2018 are reflected in the following table. It reflects the way that expenditure increased as Ngā Taonga scoped and quantified what was required to manage the collection as an archive, and accordingly commission and implement infrastructure, including the digital archive repository. It also reflects the fact that Ngā Taonga continued to receive the same maintenance-level funding without any additional funds to undertake preservation work, as it continued to maintain a production library service for TVNZ as well as support the intensive development of the TVNZ DPL over the first 18 months as Archive Manager.

Table 1. Funding and Estimated Ngā Taonga Costs for Managing the TVNZ Archive Collection, and Number of Digitally Preserved TVNZ Archive Collection Titles 2014-2018²⁴

²³ Ngā Taonga also receives an annual CPI adjusted payment of \$171,000 per annum to provide the TVNZ Production Library Service.

²⁴ The table is derived from indicative costings based on available financial information. Since 1 August 2014, Ngā Taonga has been managed and reported as a single entity rather than three separate organisations and therefore a modest and unquantifiable degree of subsidisation has occurred across the collection.



Ngā Taonga reports as one entity and has done so since its inception in 2014 and has therefore not recorded each collection stream revenue and costs separately. The above graph depicts the costs that are auditable and verifiable but these are an incomplete record of the true costs spent to date on the collection.

Reporting

To MCH

The quarterly reporting of Ngā Taonga to MCH is based on collective reporting across all the collections it manages, on seven key performance indicators, which are also published in its annual report.

- KPI 1 – Achievement of Annual Acquisition Plan (%)
- KPI 2 – Collection housed in best-practice conditions (%)
- KPI 3 – Collection Available subject to rights clearance (%)
- KPI 4 – Revenue from non-government sources (\$)
- KPI 5 – Number of visitors/viewers/listeners
- KPI 6 - Responsiveness to iwi and Māori
- KPI 7 – Employee Engagement (%)

To TVNZ

Reporting to TVNZ about Production Library Service activity was originally delivered through the maintenance of a matrix of statistics collated in the same way as TVNZ had historically collected them, representing

processing hours and numbers of jobs by types of TVNZ requests. This was changed in July 2017 by mutual agreement to reflect the following data: number of requests, number of processing hours, and (from December 2017) number of titles supplied.

Renewal of Agreements

As Archive Manager of the TVNZ Collection for the Crown, the partnership of Ngā Taonga with TVNZ is vital to facilitate the preservation and availability of the collection for all New Zealanders. Ngā Taonga believes that through this renegotiation it can add significant value for TVNZ and is seeking mutually beneficial outcomes in a new agreement. The agreements currently in force require re-negotiation by the three parties to ensure a less unwieldy arrangement and full consultation with the Crown. The new agreements need to be user-friendly and link to future reporting. Additionally, the Public Records disposal deferral for the TVNZ collection expires in 2019, which requires action now to determine planned outcomes and actions.

Ngā Taonga requires a singular operational agreement under a revised MoU with TVNZ and/or MCH, in line with its current standards of stakeholder relationship documentation, and stakeholder expectation. These two new documents need to cover all the relevant clauses across the three inter-related contracts.

Over the last 12 months, Ngā Taonga has been collating the documented issues that the renewed agreement will need to cover, as well as adding pan-archival issues that have arisen through the development of its relationship with TVNZ. It has identified the need for a single agreement that is comprehensive and straightforward to use and consult on a day-to-day basis.

To uphold both its reputation as the audiovisual archive for all New Zealanders, and its 'public good' ethos, Ngā Taonga has identified that it requires more autonomy in providing effective and timely third-party access to the collection for iwi, the heritage sector and other not-for-profit requesters. Ngā Taonga also requires the ability to utilise the collection more freely for its audience engagement and outreach purposes. It has resolved its ability to seek TVNZ viewing numbers for programmes containing footage supplied from the collection, and agreed a set of database fields to be included in the Ngā Taonga online catalogue.

Given the tri-partite nature of the existing agreements, Ngā Taonga will initially need to consult with MCH, as the owner of the collection, to determine their expectations around the nature and structure of the agreements and role within the renegotiation process. It will then confirm a renegotiation process with TVNZ. The areas that Ngā Taonga are seeking to incorporate within this renegotiated agreement are as follows:

- Renewal of the status of Ngā Taonga as Archive Manager
- Online Access to the Archive Collection (documenting selected TVNZ database fields and content to be included in the Ngā Taonga online catalogue)
- Access by TVNZ to the Archive Collection (including a revised Service Level Agreement and associated fee structure which incorporates revised timeframes for access to film elements)
- Access by Ngā Taonga to the Archive Collection (including the ability to use it for its audience engagement and outreach resources)
- Access by Third Parties to the Archive Collection (including the ability of Ngā Taonga to licence not-for-profit use of TVNZ copyrighted footage, and allow screening loans to third parties)
- Archive Collection Development (growing the digital collection as a backup to the TVNZ Digital Production Library: currently it stops at November/December 2015)
- Disposal Schedule (ability to dispose of equipment from the premises when it has passed its lifespan)
- Reporting (reflecting mutually beneficial statistics)

Benchmarks for Future Reporting

Ngā Taonga believes benchmarks for future reporting should be mutually agreed and reflect all the activities required to manage the collection together in its entirety. Reporting should be set against its KPIs and each phase of the process (accessioning, digital preservation, cataloguing, access) so the reporting is expanded to reflect the quantum of work required and not just the 'end goal'.

- KPI 1 – Achievement of Annual Acquisition Plan (%)
Collection development / accessioning
- KPI 2 – Collection housed in best-practice conditions (%)
Vault storage conditions and costs
- KPI 3 – Collection Available subject to rights clearance (%)
Titles digitally preserved, titles on online catalogue

- KPI 4 – Revenue from non-government sources (\$)
- KPI 5 – Number of visitors/viewers/listeners
Audiences reached
- KPI 6 - Responsiveness to iwi and Māori
- KPI 7 – Employee Engagement (%)

Ngā Taonga can also contribute the quarterly reporting that it currently supplies to TVNZ for the PSLA, which reflects TVNZ's access to the Archive Collection. This covers numbers of requests, processing hours and titles supplied.

Released under the
Official Information Act

Appendix A: Film Digital Preservation Workflow

Select title for preservation

The film preservation workflow begins with selecting titles to preserve. In some cases, this may mean selecting a series (for example, *Kaleidoscope*), in others, the title is selected because a researcher or producer has requested access.

Each of the episodes within a series is a title and has a database record. In the Television New Zealand collection, particularly in News & Current Affairs, many broadcast programmes have multiple title records, with each record representing a segment of the programme.

Identify all potential source materials for the title

Most titles (or episodes) have multiple physical items attached to them. Many programmes have a film component, but were finished on video, or in some cases the most complete copy of the broadcast (including in-studio material) is on videotape. Research into the potential source materials can be time consuming, spanning multiple collections and databases, and requires in-depth knowledge of the databases, the card index and other sources of information.

It is best practice to preserve from the most original material as generations of copying result in a loss of quality in both film and videotape. Where the most original material is a mix of formats (often the case in News & Current Affairs), pragmatic decisions regarding the quality differential between sources, as well as time available for the work, must be taken. Most often this decision is to preserve from the best videotape source in the video preservation workflow.

Where the title is finished on film as a complete programme, it is expected that the Film Preservation Workflow will apply.

Inspect elements and determine best preservation sources

In many cases, there will be multiple film elements (both image and sound) are available due to the photochemical duplication process required to broadcast from film. Each element is inspected, compared and assessed for quality. Items which are inspected in the course of this research are rehoused into archival enclosures if necessary.

Repair, clean, measure, add leaders

The best element/s are repaired and cleaned, measurements of length and shrinkage are taken, and leaders added to ensure smooth running through the scanner. Condition reports are added to the database record.

Scan picture

The image element/s are scanned frame by frame at high resolution to capture the most information available in the image. The machine is calibrated for each different kind of film stock and runs at real time, or slower if the material is aged and/or damaged. Multiple scanning of images may be required if the components of the title are spread across several carriers.

Digitise sound

The sound element/s are also digitised and the signal captured in real time. Some normalisation or noise-reduction may be necessary but is not automatically employed.

Synchronise picture and sound

Once in digital form, the sound and image must be matched up again. This is a software operation that requires some editing skill.

Colour correction

Images are scanned in a particular colour space (a specific organisation of colours) in order to capture the most detail possible, however this renders the image un-lifelike and does not reflect the original material. Therefore, some colour correction (for light levels, for colour balance) is applied. This is a subjective judgement using as much contemporary reference material as possible to ensure that historic images match their context. Simple colour correction may take 4 times as long as the duration of the programme, in some difficult cases it can take as many as 20 times the duration. This is another part of the workflow where pragmatic decisions must be taken.

Quality control

The finished title must undergo quality control (QC). For film titles, this requires a staff member (preferably two) to watch the final file in its entirety at normal speed to monitor for issues such as colour, exposure, focus, the presence of artifacts (dust and damage marks) and speed. If problems are uncovered, they must be addressed, and the file re-exported and QC'd again until it passes.

Create new files

When QC is passed, additional file deliverables (according to client specifications and purpose) are created. Both raw (uncorrected scanned copies) and colour corrected versions are kept.

Create new database entry

Accessioning and data wrangling (moving the data for storage) happen once all the files are created and QC'd. Files are named and "bundled" together, and a new database entry is created on the title record, where preservation (processes undertaken, decisions taken) and technical (file specifications, equipment used) metadata are recorded.

Catalogue

The cataloguing process ensures the description of the content is standardised and updated as necessary on the relevant fields of the database.

Access

Once the preservation and cataloguing workflow is completed, staff, clients and researchers can access the title either in-house or by upload to the online catalogue, or by linefeed to TVNZ.

Migration

Ongoing digital housekeeping, assessment and migration is necessary to ensure the material is always stored safely, with geographical separation, on a playable carrier, according to archival and kaupapa-based protocols and standards, with all its content and metadata intact.

Released under the Official Information Act

Appendix B: Video Digital Preservation Workflow

Select title for preservation

The Video Preservation Workflow begins with selecting titles to preserve. In some cases, this may mean selecting a series (for example, *Waka Huia*), in others, the title is selected because a researcher or producer has requested access.

Each of the episodes within a series is a title and has a database record. In the Television New Zealand collection, particularly in News & Current Affairs, many broadcast programmes have multiple title records, with each record representing a segment of the programme.

Identify all potential source materials for the title

Most titles (or episodes) have multiple physical items attached to them. If the original broadcast was recorded on one-inch videotape, there are usually also Betacam SP, Digibeta, and VHS copies that also reflect the content of the programme. It is best practice to preserve from the most original material as generations of copying result in a loss of quality in the video signal. Factors that also influence the choice of source material include physical condition and the availability of playback equipment. Items which are inspected in the course of this research are rehoused into archival enclosures, with metadata updated if necessary.

Clean and repair if necessary

Before digitisation, each tape is cleaned by machine in real-time, with additional hand-cleaning or repair as necessary. Tapes which are mouldy or suffering sticky shed syndrome (where particles from the tape become loose) cannot be safely digitised without treatment, as both the playback equipment, the tape itself and the signal capture are compromised. In some cases, it may be necessary to treat the tape by baking in a specialist oven at low temperatures for an extended period of time, which can delay digitisation by up to 4 weeks.

Digitise through playback machine

Once cleaned and ready, each tape is played through its appropriate playback equipment and the signal captured digitally (either by analogue or digital conversion or as a natively-digital signal) in real-time.

The TVNZ collection was created for and within the broadcast environment, where standards for recording were rigorously enforced. This means that for the most part, no additional intervention is required in the captured signal – colour space and speed are locked in.

Exporting the captured signal and encoding into uncompressed preservation files can take up to 3 times as long as the captured content.

Quality control

The finished title must undergo quality control (QC). For videotape, quality control software is available and is very reliable. Using software rather than a visual QC reduces the amount of staff time spent monitoring files. If errors are identified, either by eye or using software, it is necessary to diagnose the failure (asking questions such as: Is it the tape? Is it the capture software? Is it the deck? Do the heads need cleaning?) and the work must be redone and the final product resubmitted to quality control.

Create new files

When QC is passed, additional file deliverables (according to client specifications and purpose) are created.

Create new database entry

Accessioning and data wrangling happen once all the files are created and QCed. Files are named and “bundled” together, and a new database entry is created on the title record, where preservation (processes undertaken, decisions taken) and technical (file specifications, equipment used) metadata are recorded.

Catalogue

The cataloguing process ensures the description of the content is standardised and updated as necessary on the relevant fields of the database.

Access

Once the preservation and cataloguing workflows are completed, staff, clients and researchers can access the title either in-house or by upload to the online catalogue, or by linefeed to TVNZ.

Released under the
Official Information Act