

DIGITISATION STRATEGY

2018-2025

**The time to digitise is now,
before our national audiovisual
history is lost forever.**

**As Australia's premier audiovisual
archive, the NFSA will be a leader
in large-scale digitisation of
audiovisual content – preserving
and making the collection available
for future generations.**

THE CASE FOR DIGITISATION

The National Film and Sound Archive of Australia (NFSA) is Australia's audiovisual archive – responsible for collecting, preserving and sharing our audiovisual heritage. Our total collection is over 2.8 million items.

Of this, around 400,000 items are audiovisual material – film, tape and sound – which exist in analogue (or non-digital) format. Much of this content is at risk of permanent loss because the material it is contained on is deteriorating, the technology needed to play it is obsolete or the skills and knowledge are no longer available.

Unless the NFSA increases the rate of digitisation for this important part of the collection, Australia's audiovisual heritage is at risk of being lost forever.

The process of digitisation transfers analogue film, tape and sound material to a digital format. Digitisation ensures that the collection is preserved for the future, and opens up opportunities to share the collection in ways that are not possible with analogue formats, in line with modern user expectations.

This Strategy covers the period 2018-2025, which is estimated to be the time during which much of Australia's analogue audiovisual collection will need to be digitised before it is no longer accessible.

It sets out how the NFSA will take a leadership role in the digitisation of the audiovisual collection – opening it up for access and use for everyone.

Original analogue materials are central to the NFSA's digitisation challenge



THE NFSA'S DIGITISATION CHALLENGE

There are over 400,000 items to be digitised in the NFSA audiovisual collection.

The Pressure to Digitise

The entire NFSA collection comprises over 2.8 million items, of which 52% is audiovisual material, including film, tape and sound formats. Of the audiovisual collection, over 400,000 items exist in original analogue format, with the remainder being either born digital material, or copies. It is this original analogue collection which represents the NFSA's digitisation challenge.

Current Digitisation Efforts

The NFSA began digitising its collection in 2002, using a combination of internal and external digitisation processes. It currently digitises around 9,000 audiovisual items each year. At these rates, it would take four decades to meet our digitisation challenge. Keeping in mind that the analogue collection will continue to grow for some time yet, the NFSA needs to drastically increase the rate of digitisation in order to ensure that the analogue collection is digitised before it is no longer accessible.

Stage 1: Large-scale Digitisation

First, the NFSA will work to digitise its own audiovisual collection. It will establish a large-scale digitisation facility, embracing new technology and using external (industry) and internal (NFSA) expertise to preserve Australia's audiovisual heritage.

The NFSA will prioritise the digitisation of collection material based on three questions:

- > How long will it last?
- > How significant is it?
- > How much demand is there to research, see or hear it?

Stage 2: National Centre of Excellence

Second, the NFSA will become the National Centre of Excellence in Audiovisual Digitisation, providing a hub for digitisation of audiovisual heritage across Australia using the lessons learned through our own digitisation project. The NFSA will provide leadership for the Australian gallery, library, archive and museum (GLAM) sector, and will work with partner institutions to share equipment, knowledge and skills so that everyone can achieve their digitisation goals without compromising quality.

2025: Access and Use

By 2025, the NFSA will have made digitised material available for access and use, while respecting cultural restrictions on access, recognising the claims of rights holders, and preserving material for future generations. The NFSA will work with partner institutions to bring together audiovisual collection material online so that all Australians can use and enjoy it – wherever they may be.

Digitisation Strategy

By 2025, the NFSA will be recognised as the National Centre of Excellence in Audiovisual Digitisation, establishing a large-scale digitisation facility.

DIGITISATION CHALLENGE:

Total number of audiovisual collection items requiring digitisation: 425,728



To be digitised
366,394
86%

Already digitised
59,334
14%

PRINCIPLES

LEADERSHIP

The NFSA will establish itself as a national leader in the digitisation of audiovisual collections, working with the GLAM sector to collaboratively digitise Australia's audiovisual heritage

LARGE-SCALE DIGITISATION

The NFSA will establish workflows to support large-scale digitisation using a combination of internal and external digitisation processes

PRIORITISATION OF CONTENT

The NFSA will focus on a combination of at-risk, culturally significant and 'in demand' material first

COMMUNITY-BASED APPROACH

The NFSA will reduce duplication and increase the impact of its resources by partnering with other government institutions, with the GLAM sector and with industry

INNOVATION

The NFSA will embrace new technology, including automation, throughout the digitisation process to increase our efficiency and impact

INCLUSIVENESS, ACCESS AND USE

Digitisation must increase inclusiveness and access. All material that is digitised will be made available online for use as far as rights and access restrictions allow

DIGITISATION STRATEGY: VISION

The NFSA will establish a **National Centre of Excellence in Audiovisual Digitisation** to ensure the **long-term preservation** of the NFSA's audiovisual collection, to support all **audiovisual heritage** collection holders and to make sure that people **engage** with, **learn** from and **use** Australia's audiovisual heritage in a **digital format**.





DEADLINE 2025: COLLECTIONS AT RISK

The NFSA estimates that, by 2025, much of Australia's audiovisual heritage will be lost forever if not digitised.

Digitisation of all Analogue Formats

In 2015 the NFSA released *Deadline 2025: Collections at Risk*, which highlighted the fact that Australia's audiovisual heritage will be lost forever if not digitised by 2025.

Deadline 2025 focused on the challenge of magnetic tape, which is deteriorating at a faster rate than many other formats held in the NFSA collection. But the digitisation challenge for the NFSA includes all analogue formats. As collection material ages, it is increasingly difficult and expensive to access – it becomes more fragile, and the equipment it is played on becomes rarer.

The NFSA's analogue audiovisual collection includes every available type of format – including celluloid film negatives and prints, sound recordings on magnetic tape, acetate and vinyl disc, and radio, film and television broadcast on various magnetic tape formats.

This Digitisation Strategy covers the whole of the NFSA's analogue audiovisual collection. The NFSA will prioritise the material most at risk – including material held on magnetic tape that is culturally significant or in public demand. The NFSA has set a target of 2025 for its digitisation efforts, because it is the date by which it is estimated that the most at-risk material will be lost forever if not digitised.

There is now consensus among audiovisual archives internationally that we will not be able to support large-scale digitisation of magnetic media in the very near future. Tape that is not digitised by 2025 will in most cases be lost forever.

Deadline 2025

CHALLENGES

Operating Environment

The challenge is to digitise as much as the NFSA can, to the highest possible standards, working within its current resources.

Collection Growth

While the future of the NFSA's collecting activity is born digital, it will continue to collect analogue material. In 2016-17 the NFSA acquired 46,000 new collection items, of which around 75% were analogue. This trend will continue for some time yet as obsolete analogue material is made available for the NFSA collection.

Format Complexity

The NFSA's audiovisual collection covers every format of sound and vision content creation over the last 100 years. The technical complexity in achieving digitisation across such a wide range of formats is immense.

Resourcing

While the NFSA works to raise revenue where it can, the collection is a national asset and the opportunity to generate commercial income from it is limited. The NFSA must ensure that it operates within its current resources and looks for efficiencies wherever possible.

Storage of Digital Files

As the NFSA's digital content increases, so does the challenge of storing it in an accessible way. For many years, like most audiovisual archives across the world, the NFSA has used Linear Tape-Open (LTO) - a magnetic tape data storage format - to store digital files. But, as technology adapts and access demands increase, the NFSA needs to look at options to store digital collection material 'in the cloud' so that it can be easily retrieved when needed. While this will address access needs, it will also increase storage costs - and the NFSA must take this into account in its planning.

Access Demands

The NFSA is committed to best practice in its management of the audiovisual collection. This includes meeting international and national standards for preservation of analogue content. However, the NFSA also recognises that it has an obligation to provide access to the collection. It will seek to balance the priorities of digitising to archival standards with the imperative to ensure that digitised material is readily available for use.

Technical Skills

As formats age, the technical knowledge and skills needed to access the content held on them becomes increasingly rare. The NFSA will work to ensure that its staff continue to have expertise in analogue audiovisual formats into the future, to support preservation of and access to heritage collections.

Time

As analogue material deteriorates, digitisation becomes more complex and expensive. Eventually, the NFSA's audiovisual collection will no longer be able to be digitised because the content itself is unable to be played, the machinery it was created on has become obsolete or the skills required to access it are no longer available. The NFSA is working against the clock to ensure that Australia's audiovisual heritage is accessible for future generations. The most cost effective time to digitise is now.

The NFSA is working to ensure our audiovisual heritage is accessible for future generations



OPPORTUNITIES

Operating Environment

The NFSA is uniquely placed to take a leadership role in digitising Australia's audiovisual heritage.

Expertise

The NFSA has world-leading expertise in the digitisation of audiovisual materials. Until now, it has focused this expertise on complex digitisation processes undertaken for specific projects – either for restoration and preservation purposes or to service access requests. In future, the NFSA will also use its skills for large-scale digitisation workflows, significantly increasing its own digitisation capacity and leading the sector to do the same.

Uniqueness

As the only national audiovisual archive in Australia the NFSA has a unique collection which tells the Australian story through its film, broadcast and sound output. The NFSA's collection of over 2.8 million items is an unparalleled source of information and content about who Australia is as a nation.

Existing Investment

The NFSA collection is valued at over \$250 million. Digitisation of the collection maximises the Australian public's investment in this important asset, by preserving it for future generations and making sure that it is available for access and use.

Partnerships

The NFSA is part of a community of galleries, libraries, archives and museums (GLAMs) across Australia which all face the challenge of digitising collections before they are lost forever. Through the National Centre of Excellence, the NFSA will share its digitisation capacity with partner institutions to address the digitisation challenge. The NFSA will work with the GLAM sector to share skills, knowledge and equipment in order to safeguard Australia's national cultural heritage.

Innovation

As technology develops, so too does the capacity to digitise at higher speeds, to greater quality and with lower risk and cost. The NFSA will endeavour to embrace innovation, new technology and automation wherever possible to increase its digitisation output. The NFSA will review the use of existing and new technology throughout the life of this Strategy to ensure that it is maximising its impact.

Social Inclusion

Online digital collections are able to be accessed and used by audiences who could otherwise not access material in analogue format due to geographic, physical or social restrictions. Digitisation therefore increases the potential to be an inclusive and open national institution.

BENEFITS

Through large-scale digitisation and leadership, the **National Centre of Excellence in Audiovisual Digitisation** will provide a range of benefits for Australian galleries, libraries, archives, museums and all users of cultural heritage collections.

AUSTRALIAN AUDIOVISUAL COLLECTIONS DIGITISED

ACCESS AND INCLUSION

Digital collections are easily accessed online – making them more inclusive

DIGITAL PRESERVATION

Digitisation preserves collection material for future generations

COORDINATED NATIONAL COLLECTION

Digital collections can be brought together in one place online

INNOVATION AND CREATIVE RE-USE

Digital collections are readily available to be re-used by creators in innovative ways

SEARCHABILITY AND RESEARCH

Digital collections are more easily searchable online, and are available for in-depth research

NFSA COLLECTION DIGITISATION

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Addressing our digitisation challenge

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Building physical infrastructure

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National coordination

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Skills sharing

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Research

NATIONAL LEADERSHIP HUB

GOALS

The NFSA will deliver the **Digitisation Strategy** in two stages, with the ultimate goal of providing digital access to Australia's audiovisual heritage.

NFSA NATIONAL CENTRE OF EXCELLENCE IN AUDIOVISUAL DIGITISATION

STAGE 1: 2018

Establish a large-scale digitisation facility for the NFSA

Increase workflows for digitisation of the NFSA audiovisual collection using a mixture of internal and external digitisation processes

STAGE 2: 2021

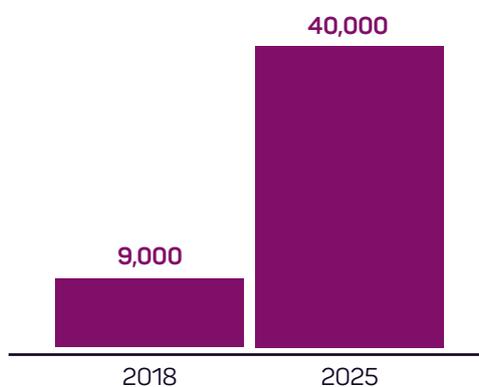
Build a National Centre of Excellence in Audiovisual Digitisation

Extend reach to include other national collecting institutions and the Australian GLAM sector

OUTCOME: 2025

Access and Use

The NFSA's audiovisual collection is digitised and available for access and use



Rate of NFSA audiovisual collection digitisation, per year

COSTS AND TARGETS

It is difficult to estimate the cost of digitising the NFSA's audiovisual collection. The NFSA will work to achieve the maximum level of digitisation before 2025, working with the known costs at this point in time.

How much will it cost?

It is very difficult to estimate the cost of digitising audiovisual material, because of the number of variables. For example, as the rate of digitisation increases, the cost per item comes down. But the equipment used to digitise also deteriorates more quickly, requiring a higher level of maintenance and investment. In addition, every format needs a different digitisation process, and the time taken to digitise material increases the more deteriorated and 'at risk' it is.

The NFSA has been working to identify, as closely as possible, the cost of digitising its audiovisual collection. In Deadline 2025 the NFSA estimated the cost of digitising the magnetic tape collection as at least \$10 million – but noting that it was likely to be much higher.

Based on detailed cost modelling, it is believed that the cost of digitising is around \$2,500 for each item of film, \$2,200 for each item of recorded sound and \$2,300 for each item of magnetic tape. This cost includes a significant amount of staffing expertise and technical hardware required to produce a high quality, useable output.

It is expected that the cost of digitisation will reduce over time, as skills in large-scale digitisation grow and as technology improves the speed of digitisation.

How much will be digitised?

In 2017 the NFSA digitises around 9,000 audiovisual collection items every year. If it is to achieve its digitisation goals, the NFSA needs to dramatically increase the rate of digitisation.

By consolidating technical infrastructure and expertise, the NFSA estimates that it can increase the rate of digitisation over the next eight years so that by 2025 it is digitising around 40,000 items per year.

This means that the NFSA will be able to digitise around half of the audiovisual analogue material held in the NFSA's collection by 2025 – or around 200,000 items.

The long-term goal is to ensure that every item in the NFSA is preserved and available for future generations. While the NFSA will not be able to digitise everything before 2025, it will focus on the most at-risk and significant items.

This Strategy is just the beginning of a digitising future, and the NFSA will continue to work beyond 2025 to digitise our analogue audiovisual collection.

What standards will we digitise to?

Where possible, original collection material that has not yet been preserved in analogue format will be digitised to the highest possible quality for the purposes of preservation. However, the NFSA will digitise to 'accepted' standards where this matches industry outputs (such as in relation to broadcast television) and where the NFSA has already preserved the material in analogue format.

OUTCOMES

The National Centre of Excellence in Audiovisual Digitisation will be a hub for large-scale digitisation of audiovisual heritage, providing leadership, skills development and practical support to the Australian GLAM sector.

NFSA Collection Digitisation

Addressing our Digitisation Challenge

First and foremost, the National Centre of Excellence will be a hub for large-scale digitisation of audiovisual collection heritage. The NFSA will develop the infrastructure and know-how to digitise its own collection, with a mixture of in-house and outsourced digitisation – to the benefit of all audiovisual collections.

Building Physical Infrastructure

The National Centre of Excellence will be focused around a facility for large-scale digitisation of audiovisual material. The NFSA will invest in infrastructure and use the latest technology, including automation wherever possible, in order to dramatically increase its rate of digitisation.

National Leadership Hub

National Coordination

The NFSA will work with the national collecting institutions to coordinate digitisation of all audiovisual collections, to achieve the most efficient outcomes possible, to share skills and resources and to ensure that national audiovisual heritage is preserved and available for all Australians.

Skills Sharing

Using the knowledge it has gained through its own digitisation project, the NFSA will provide guidance and leadership in large-scale digitisation for the Australian GLAM sector, including through workshops, best practice guides and hands-on assistance.

Research

The National Centre of Excellence will be a regional hub for research on digitisation and digital preservation of audiovisual material.

**NATIONAL FILM AND
SOUND ARCHIVE OF AUSTRALIA**

CANBERRA

McCoy Circuit, Acton ACT 2601
GPO Box 2002, Canberra ACT 2601
P +61 2 6248 2000 **F** +61 2 6248 2222
Freecall: 1800 067 274

SYDNEY

Level 1, 45 Murray Street, Pyrmont NSW 2009
PO Box 397, Pyrmont NSW 2009
P +61 2 8202 0100 **F** +61 2 8202 0101
Freecall: 1800 067 274

MELBOURNE

Level 4, 2 Kavanagh Street, Southbank VIC 3006
GPO Box 4317, Melbourne VIC 3001
P +61 3 8638 1500 **F** +61 3 8638 1501
Freecall: 1800 067 274

NFSA.GOV.AU