

Future-Proofing the AV Archive

Pathways to Resilient Heritage in Uncertain Times

Research report supported by the
NWO Impact Explorer funding scheme
Carolyn Birdsall (University of Amsterdam)
May 2026



Contents

| | |
|---|----|
| Executive Summary | 3 |
| Abbreviations | 4 |
| Introduction | 6 |
| 1. Internal Processes: Workflows, Technology, Collaboration | 10 |
| 2. External Relations: Access, Curation, Engagement | 19 |
| 3. (Inter)national Pressures: Climate Risk, Cyber-Attacks, Political Upheaval and Conflict | 30 |
| Conclusion | 40 |
| About the Dataset | 42 |
| Acknowledgements | 43 |
| Resources & References | 44 |

Executive Summary

Audiovisual (AV) archives in Europe today are contending with the risk of cyberattack and climate-related disaster, as well as right-wing attacks on public media institutions, geopolitical uncertainty and the threat of military conflict. At the same time, there have been renewed efforts to recognise the value of public broadcasters as “critical infrastructure” for ensuring healthy democratic societies (Doyle, Barr & Boyle 2025), an evaluation that can also be extended to their AV archive collections.

This report will discuss recent developments in audiovisual archives and possible pathways to ensuring the viability of AV archives as resilient heritage in uncertain times. In what follows, this report will outline recent developments, drawing on interviews with more than 25 AV archivists from 15 European countries (predominantly working at public service media archives), with particular attention to how archives are 1. adapting their archival workflows to a digital transformation including AI (**Internal Processes**), 2. working to increasing their value via access strategies and public engagement (**External Relations**), and 3. taking precautions against diverse threats, with further potential to improve disaster planning (**Inter)national Pressures**.

The report will conclude with an overview of its key findings, and will also include insights from the author’s experience of collaborating with the Netherlands Institute for Sound & Vision (NISV) on the creation of a digital story “**Heritage under threat**” (in Dutch: “**Erfgoed onder vuur**”) as a way to engage both the broader public and archive professionals in the topic of potential threats to AV archival collections. The main insight elaborated in the report is that AV archives’ diverse and rich collections hold significant public value, yet it is essential to ensure that they are ‘future-proof’ as they face a diverse set of present challenges and potential risks.

Abbreviations

| | |
|-----------|--|
| AI | artificial intelligence |
| AMIA | The Association of Moving Image Archivists |
| AV | audiovisual |
| BL | British Library |
| DRM | disaster risk management |
| EBU | European Broadcasting Union |
| FIAF | International Federation of Film Archives |
| FIAT/IFTA | International Federation of Television Archives |
| IASA | International Association of Sound and Audiovisual Archives |
| MFRR | Media Freedom Rapid Response |
| NISV | Netherlands Institute for Sound & Vision |
| PMA | Public Media Alliance |
| PSM | public service media |
| RFA | Radio Free Asia |
| RFE/RL | Radio Free Europe / Radio Liberty |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| USAGM | United States Agency for Global Media |
| VOA | Voice of America |
| VoD | video on demand |

Introduction

In recent years, public service media (PSM) in Europe have been targeted by right-wing politicians, who have variously called for budget cuts to public broadcasting, for the removal of executive managers or individual journalists, or have taken legal steps to censor or suppress unfavourable reporting (Holtz-Bacha 2021). Such attacks on media freedom, along with the proliferation of online misinformation, has also prompted robust defence of public media institutions in providing trusted news content. Other recent crises, such as the COVID-19 pandemic, have led to a renewed appreciation of public broadcasters as an 'infrastructural asset' for the democratic functioning of European societies, comparable to other critical national infrastructure such as railways, energy and healthcare (Doyle, Barr & Boyle 2025). This insight has been echoed in a [2025 statement](#) by the Global Task Force for Public Media, who have emphasised that public broadcasters "should be recognised as critical infrastructure, underpinning civil society, democratic resilience, and social cohesion." In these discussions, organisational *resilience* has been emphasised as a crucial factor for critical infrastructure providers; building it requires strong adaptability, agility and proactive risk assessments (Doyle, Barr & Boyle 2025: 1143-1146).

In the context of PSM archives, a recent [European Broadcasting Union](#) (EBU) has argued for a greater awareness of the immense value that PSM archives have for public broadcasters in their efforts to serve the public interest (EBU 2025: 14-23). While this report does not deploy the notion of resilience, its commitment to outlining the challenges and potential for unlocking PSM archives as a "priceless resource" align well with the question of how to best prepare AV archives for uncertain times. This urgent concern was expressed in the AV archivist association IASA's announcement of their 2026 conference theme "Archives in Times of Peace and War," with its [call for applications](#) noting that AV archives have become "targets in conflicts that test the limits of cultural resilience, digital security and professional ethics." Similarly, the resilience of AV archives is emphasised in a recent handbook on disaster preparedness, where this term is defined as the ability "to resist, absorb, accommodate, adapt to, transform, and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management" (Walsh 2024: 134). Across the broader archival sector, there have been similar calls to make cultural heritage more resilient, with action prompted most recently by an [event](#) marking the 70th anniversary of the [UNESCO Hague Convention](#)

for the [Protection of Cultural Property in the Event of Armed Conflict](#) on 14 May 2024. An [‘Action Day for Resilient Heritage’](#) planned for exactly one year later took as its focus raising awareness about potential threats to cultural heritage, with the KB National Library of the Netherlands director [Wilma van Wezenbeek](#) arguing that heritage institutions remain “insufficiently resilient to disaster and cyber or physical attacks.”

Against this background, the main aim of this report is to examine the current situation of AV archives in Europe and identify key aspects to how they can ensure that they are ‘future-proof’ in the face of present challenges and potential risks. The central questions concern:

- How are AV archives continuing to work on improved documentation and stewardship of their collections? And are they adapting their archival workflows in line with rapid digital transformation, including AI? [**internal processes**]
- How can AV archives ensure their resilience via improved access and use of their digitised collections? How can they enhance ‘value’ through public engagement? [**external relations**]
- What are the larger threats and uncertainties AV archives are currently facing? How can archives best prepare for diverse (inter)national pressures, from climate risk and cyber-attacks through to political upheaval and military conflict? [**(inter) national pressures**]

In what follows, these central concerns are taken up as a way to move up through various scales at which the ‘future-proofing’ of AV archives takes place: from their own **internal** processes and workflows, through to **external** outreach and public engagement, and in larger national and global frameworks that figure as **(inter)national pressures**. Supported with an ‘Impact Explorer’ grant by the Dutch Research Council (NWO), this research primarily draws on interviews conducted with more than 25 AV archivists from 15 European countries in 2025-2026, with particular attention to PSM archives that are among the largest and oldest archives in Europe. To ensure broader insights in the dataset, those interviewed represent varying ages and levels of seniority and work in diverse national and regional contexts across Europe. While the majority work for larger public broadcaster archives, approximately one-third work at another type of AV archive, ranging from smaller broadcast organisations or film archives through to audiovisual departments within national libraries and national archives (see [About the Dataset](#)). While this report also draws on recent surveys conducted by professional organisations (e.g. EBU, FIAT/IFTA), it recognises the benefit of semi-structured interviews in gaining qualitative insights on the AV archives field (Gracy 2004, van Dalen et al. 2021). Primarily

intended for AV archive professionals, management and policymakers, the findings of this report – on AV archival resilience amidst diverse challenges and potential risks – will hopefully be relevant to the broader archival and heritage sector.

1

Internal Processes: Workflows, Technology, Collaboration

Future-proofing AV archives – to ensure they remain as resilient and evolving ‘critical infrastructures’ – primarily relates to the robustness of their internal operations. Indeed, the core set of activities that AV archives have a mandate for generally comprise “the collecting, preserving, management and use of audiovisual heritage” (Edmondson 2004: vi). Since around 2000, most AV archives in Europe have made a significant effort to digitise their analogue collections, often supported by national and Europe-wide investment schemes (EBU 2018). More recent digital strategies in European AV archives have focused on achieving a broader ‘**digital transformation**’ as archives have endeavoured to complete the bulk of analogue collection digitisations while also investing in asset management systems (and tools) to assist with the processing and management of large collections of media data, particularly within public broadcaster archives. A significant challenge that AV archives are facing within their digital strategy concerns how to best negotiate the potential opportunities presented by AI (artificial intelligence) for diverse applications. With this in mind, the present section asks how AV archives are continuing to work on improved documentation and stewardship of their collections. It will first treat the central **remit** and **workflows** taking place, before turning to **technological processes**, including recent developments with **AI**, and finally, it will consider the role of diverse **collaborations**, including those focused on upskilling and knowledge transfer.

The archivists interviewed for this project stressed the complex **governance models** and **legal frameworks** that guide their organisations’ remit. Amid the diversity of governance structures, some archives are part of an explicit mandate in heritage and broadcasting laws to keep archives, and others are departments within larger national libraries or institutions for which AV content is partly or fully subject to legal deposit. In the case of public service media in Europe, documentation and archives teams generally work as a single unit mandated as a ‘**production archive**,’ but are sometimes split across separate national radio and television organisations. In some countries, a national audiovisual institute cooperates with broadcasters to manage their legacy collections as well as new AV content ingest, thereby taking on archival responsibilities, including digitisation, rights management and access provision. Examples of this type of

audiovisual institute include **INA** (Institut National de l'Audiovisuel) in France or **Sound & Vision** in the Netherlands. In other countries, too, there are national institutions – such as **meemoo** (Flanders, Belgium) – that variously help manage collection management and digitization processes, along with supporting access and knowledge-sharing strategies for diverse heritage institutions (including broadcasters). In some cases, the regulatory structure for a national AV institute can lead to some complications with rights management, as an institute may care for a collection, but the broadcaster's rights over this material may lead to strict limits on content access and re-use, or to new 'grey' areas with regard to posting via online platforms and social media (Pietsch 2024: 10).

In terms of archival workflows, the main areas of activity relate to **acquisition, preservation, documentation/cataloguing** along with **access/use** (for this last aspect, see **2. External Relations**). **Acquisition** generally relates to the process by which archives select and acquire the records that will be included in their collections, which may take different forms, but generally involves some level of formal agreements and appraisal (e.g. evaluating value, assessing condition, storage needs) and inventorisation. In most broadcast archives, digital ingest systems are in place for all linear radio and television output. Nonetheless there may still be donations, duplication copies, or raw footage ('rushes'), for which selection and appraisal may need to take place. One interviewee noted that their television station did not have mandatory archiving of raw footage, which often leads to frustrations among sports producers today, who can only access early footage of certain athletes within archived programmes, with limited possibilities for re-editing archived raw footage. Other archivists noted that some **deaccessioning** also takes place with certain magnetic tape carriers, which are deposited after mass digitisation and quality control checks, with only certain legacy carriers retained for heritage reasons, or in anticipation of future technical options for higher quality transfers (e.g. optical reading technology for 78 rpm discs). **Preservation** can be broadly understood in terms of appropriately storing, treating or repairing legacy carriers (**conservation** and **restoration**), digitisation (digital 'reformatting' from legacy carriers) and long-term digital preservation (the maintenance of digital files through active data migrations and management of data integrity).

The third aspect, **documentation/cataloguing**, represents a crucial domain within AV archival management and has been positioned as a central concern within a recent IASA publication, which notes that a "core responsibility of an archive is to ensure sustainable access to information" (Prentice & Gaustad 2017: 5). **Documentation** refers to a broader process by which the decisions or actions around any given archival record (or

collection) are maintained for future reference, which could span from basic inventories or lists through to the maintenance of descriptive, technical and preservation metadata. Technical and preservation metadata may also include documentation about “rights and reproduction or other access requirements, selection criteria or archiving policy for digital content, audit trails or logs created by a digital asset management system, persistent identifiers, methodology or documentation of the imaging process, or information about the source materials being scanned” (Puglia, Reed & Rhodes 2004: 8). Most interviewees noted that their institution draws on international metadata standards, such as **PBCore**, **EBUCore** or **Dublin Core**, but there is no standard across AV archives (or PSM archives). Such metadata standards help to structure metadata when documenting records, in particular allowing for a **controlled vocabulary** of a fixed list of terms or phrases that can be used in metadata fields. Generally, some local adaptation of these standards occurs to account for a specific language context and the types of archival content a given institution manages. For instance, one interviewee noted that their system is Dublin Core-based, but they tailored it to broadcast content (e.g. adding fields for direction, speakers, authors, broadcast station), along with a national thesaurus with locally added index terms.

In the past, broadcast archives often had extensive cataloguing teams who created in-depth summaries of programme content (including detailed shot descriptions at television archives), in order to best facilitate search and reuse in programme production. However, increasingly the metadata found in archive catalogues have multiple sources, ranging from basic metadata supplied by journalists (e.g. title, date, place, names), created by archivists, and generated through various forms of automation (e.g. file creation date or using tools such as automatic speech recognition). In addition, some institutional catalogues include metadata entries that were created by other institutions (that were later merged), by regional offices, by discrete teams (e.g. music librarians within a broadcaster) and, in some cases, by users (e.g. user generated metadata), which results in uneven metadata fields. These discrepancies have been described as **metadata fractures**, defined as being “caused by changes in selection procedures at archives, and by the use of different methods for creating metadata” (Manders & Wigham 2024). In this context, it is productive to improve awareness of these fractures, particularly in terms of adjusted strategies for search results, which has prompted broader research-archive collaborations to improve the creation of machine-readable **data envelopes** (or data sheets) that could potentially allow for improved access to provenance, contextual information and ethical concerns, such as bias and blindspots (Eskevich et al. 2025). Another recent proposal has suggested the concept of “meta-metadata,” which could serve as a factual documentation of “who created or modified

metadata when, with which tools and under which rights or licenses” (Declercq forthcoming), and thereby serve as a stable layer of information that describes and documents metadata for AV archives.

These developments point to the significance of what archives expert Ray Edmondson has referred to as a necessary commitment to ‘contextual integrity’ in AV archival documentation practices, understood as the process by which archives “draw the attention of users to contextual information, help them to understand original form and context” (Edmondson 2004: 49, 62). A number of interviewees at national/state-run institutions noted that the impetus for providing additional contextual information has additional relevance in post-authoritarian and/or former Communist contexts. This often results in contextual information being added to descriptive metadata (e.g. in the ‘summary’ or other open-text fields for annotation), for instance to indicate the state’s influence on cultural production (e.g. nationalisation of music record labels, or centralised control of broadcasting). Overall, archivists noted that the historical experience of war, occupation, state censorship and political transformation had often led to notable selectiveness within historical AV collections and their archival documentation. For instance, one archivist noted that private recordings of socialist-era radio broadcasts are sometimes donated to national libraries and archives, which not only tend to reveal gaps in the collections of national broadcast archives, but can create tensions about which institutions in a given national context have the remit to care for amateur recordings of past broadcast content.

In addition to metadata strategy, a key part of ensuring consistent documentation concerns the **technological** processes and systems needed that support archival workflows: AV archives are often technically complex, in terms of scale and due to the speed by which carriers and formats have changed, with reformatting (and migration) taking place in recent decades as archives shifted from using film, tape, cassettes and disks to digital files and cloud-based services. This reflects the pressure on archives to contend with rapid technological change and **obsolescence**. As Edmondson noted in 2004, “archives and archivists, with their limited economic and legislative power, must react to change as best they can [...] Format evolution is driven by marketing, not archival, values” (2004: 45). Technological obsolescence is prevalent for **audio, video and film formats**, across analogue and digital-based formats. This situation also influences archives’ ability to maintain ‘legacy’ storage and playback devices, even for digital playback technology that was discontinued relatively recently (e.g. DAT players and spare parts). Such challenges often mean that smaller archives that have technical, expertise and/or financial constraints often choose to only digitise more common

formats in-house, while using the services of external vendors to deal with fragile or technically challenging formats. Larger archives, too, also often opt for digitisation by external vendors as a cost-effective alternative to in-house digitisation.

Many AV archives initially started with standalone databases, which often began with electronic data processing in the 1970s and 1980s, before moving to improved databases in the 1990s, and gradually towards digital file-based archiving in the 2000s (Taurino & Aitaki 2024). AV archival holdings are often vast in size, and may include multiple versions of AV records that have been drawn from multiple sources, or may be the product of past access copies or multiple versions made in the context of preservation and restoration practices (Fossati 2012). Overall, AV archives have long been involved in automatic description development projects, with an early example being that of the Informedia Digital Video Library project, launched in 1994, which developed speech recognition, image detection and automated indexing of CNN and PBS video content. Across the sector, AV archives have actively participated in diverse innovation projects since the early 2000s, often in collaboration with university researchers, with a strong domain of broadcasting-focused research and development units, such as the [BBC Research and Development](#) (UK), [INA Research](#) (France), [RAI CRITS](#) - Centre for Research, Technological Innovation and Experimentation (Italy), [Sound & Vision LABS](#) (Netherlands) or the [EBU Technology & Innovation](#) department.

A recent EBU report (2025: 44) has noted that at PSM archives, media production and archive metadata systems were historically kept separate, but around half of surveyed broadcast archives have moved towards integrated Media/Digital Asset Management Systems (MAM/DAMs). Interviewees described the process of preparing for a MAM/DAM system as often a multi-year process with intense cooperation between their institutions and commercial vendors, and also requiring extensive internal cooperation and “[collaborative problem-solving](#)” between their archives and IT teams. While some interviewees noted that their organisations had not yet implemented such MAM/DAM systems, others noted that their organisation had chosen to build an in-house system from scratch or to purchase a commercial MAM system but create a self-developed ‘metadata layer’ to adjust the system to their specific institutional needs. As another interviewee explained, while many systems and applications are designed with cultural heritage use in mind, they are rarely built for the specific needs of broadcasters and/or audiovisual records. This means that a process of customisation usually takes place during implementation and testing; and that it is essential to develop detailed technical requirements ahead of the tender process to ensure that a new system fulfils the need of archives as well as content production. This insight has been echoed in a

recent report that cites some of the available commercial vendors (e.g. Vizrt, Tedial, AVID, Dalet and TransMedia Dynamics), and notes that MAM/DAMs generally work well for archival needs, yet encouraged AV archives to engage in “more engagement with vendors to ensure that they offer more flexible, agile, and modular solutions that respond to the needs of the sector and the recent technological advancements in AI” (Schjøtt Hansen et al. 2022: 89). While previously commercial systems were limited in allowing for the integration of external AI tools, more recent adoption of API-driven architectures and modular AI services has improved interoperability, with commercial MAM systems now typically supporting integration of both in-house or third-party AI tools in a more flexible and sustainable manner.

This keen interest in exploring the potential, ethics and risks in adopting AI for AV archives can also be seen in recent professional discussions, with two professional AV archival associations devoting their **regional** and **international** conferences to this topic in 2025. During the interviews, archivists also indicated that their organisations were already using (or testing) AI in their workflow, usually to assist them in metadata creation and enrichment and to help improve searchability in their collections. These applications include audio/video segmentation following content ingest, as well as automatic speech recognition, image/face recognition, entity extraction and automatic summarization. While interviewees expressed enthusiasm about this potential, there remained a strong emphasis on keeping ‘the human in the loop’ in AI systems, particularly given that the current quality of results using AI tools is often not sufficient to operate without “human quality control” in the form of manual checks and oversight (Bazán-Gil 2023: 4). This last point has also been underscored in recent **FIAT/IFTA survey data** on GenAI use in radio and television archives, referring to some time-saving and improved collection searchability, but an ongoing need for manual work in correcting mistakes in AI-generated summaries and transcriptions. During interviews, archivists also stressed any automatically generated information should be traceable, for example by clearly marking that a particular description had been generated by speech-to-text tools and in what year this had taken place. Such explicit framing was identified as an important measure for transparency and traceability, but also to break with the undated documentation produced through multiple layers of cataloguing amassed during the past century of AV archiving, and which has resulted in the ‘metadata fractures’ discussed above.

One of the crucial observations about AI-generated descriptions of AV content, and related possibilities for improved ‘discovery,’ is that it had further revealed the prevalence of biases and stereotypes in both AV content and in the metadata produced

by past cataloguers. One interviewee noted that she recently conducted research for an archives-based documentary focused on the 1980s, during which it was noticeable how various forms of bias (relating to ethnicity, gender and sexuality) were present in the AV content as well as catalogue descriptions. Since this interviewee works at a smaller organization that represents a large regional language group, she noted that their staffing constraints means that there generally is not enough time to add detailed annotations for such cases. Instead, this archive team chose for a workflow in which they generated a standard tag indicating the presence of problematic content in the archival record (and the year in which an archivist had flagged this). One reason for this choice is that the staff at this archive were aware that the norms for problematic language can shift over time, and they felt that this year-dated tag was the most effective way within their current constraints to be able to efficiently add such warnings, with the catalogue 'tag' facilitating findability in case of future more in-depth reviewing of such materials.

Such misrepresentation in metadata has been an ongoing topic of discussion in the professional field, and linked to a desire to achieve long-term sustainability in the documentation of AV archival collections (Pietsch 2024: 5-6). A recent **collaborative initiative**, DE-BIAS (Detecting and Cur(at)ing Harmful Language in Cultural Heritage Collections, 2023-2025) has directly responded to how AI tools and full-text search have increased the visibility of biases, stereotypes and injustices in archives metadata. The DE-BIAS project team focused on three main themes for detecting biased terms and stereotypes (migration and colonial history; gender and sexual identity; and ethnicity and ethnoreligious identity), with a commitment to developing a way to address these in a more systematic and automatised manner (Herlt 2025). Working together with community partners, the team developed a methodology for recognizing and analysing bias. This resulted in a **DE-BIAS Vocabulary** that covers 700 words in 5 European languages (Dutch, English, French, German, Italian), and is designed to help archive professionals to critically review descriptions in their collections with a view to potential bias. Drawing on this vocabulary, a subsequent **DE-BIAS Tool** was developed to help check and analyse descriptions of archival records, and help to create suggestions for appropriate terms.

Overall, the DE-BIAS project reflects a commitment to try to develop more inclusive approaches to collection description and cataloguing, whereby new interpretative layers are added, as enriched context, rather than deleting outdated and problematic metadata. Such projects reflect recent calls on AV archives to develop a stronger decolonial impulse and inclusive frameworks with their digitized collections (Chew 2022, Liarou, Carlos & Green 2025). The broader trend observed here underlines a

growing interest and adoption of AI tools, but also an awareness of the need to show AI's limits, biases and errors in a transparent manner. Former FIAT/IFTA president Brecht Declercq has also **encouraged broadcast archives to be wary** about the keen interest among large tech companies such as OpenAI to access AV archives in order to build and train AI systems, sometimes accompanied by the promise of free digitization services or access to AI tools, storage and/or computing power. In this landscape, Declercq has issued a warning about being lured by short-term financial incentives and stressed the necessity to critically evaluate and “address the strategic, legal and ethical questions” associated with entering into partnerships with such companies (2024: 5).

In contrast to the options offered by Big Tech, the recent AI4Culture project (2023-2025), funded by the European Commission, has demonstrated a strong commitment to establishing a platform to support cultural heritage institutions in adopting non-proprietary AI tools for their collections, for developing the requisite skills, and building a community of practice. Their **AI4Culture** platform, which will continue support of its AI tools for five years after the project's completion, allows for access to over 80 open source AI tools, along with open datasets (for training and evaluation), training materials (e.g. 'upskilling' tutorials and technical documentation), and 'recipes' to perform complex tasks using a combinations of AI tools. This collaborative initiative, addressing the needs of European archives has a strong emphasis on community building and knowledge sharing. This project's attention to knowledge transfer and skillsets is indicative of the awareness that a major transformation like AI should result in a broad critical awareness amongst AV archive professionals.

While AI is often implied to be the cutting-edge of technological innovation, other initiatives like **Share that Knowledge!** have emphasized the potential of new and junior colleagues to learn about the tacit knowledge of their older colleagues in AV archives, which can also be essential, in turn, for improving understanding of collection histories. Such processes will continue to be crucial as the 'AI era' increases the need for enriched context for diverse users of digitized AV archive content. Indeed, as the editors of a recent journal issue on European archives have noted, “Digitization alone does not bring contested archival collections into contact with the users and communities that can interpret them in meaningful and critical ways; it must be accompanied by outreach and active dialogue, and often by translation and recontextualization of materials and metadata as well” (Badenoch, Clark & Jancovic 2024: 6). Film archivist Adelheid Heftberger, too, has stressed that thorough cataloguing of AV collections remains key given its role in “defin[ing] the kind of knowledge and concepts we make accessible for

our institutions” (2022: 47). Accordingly, the following section will critically reflect on how AV archives have become increasingly active in contributing to the development of access strategies, including the growth in curational practices with digitised content and use of social media to encourage audience engagement, along with more inclusive approaches to community outreach and public-facing activities with AV collections.

2

External Relations: Access, Curation, Engagement

A crucial dimension to the resilience of AV archives and their potential to operate as ‘critical infrastructure’ concerns the recognition of their content as relevant, useful and valuable. This recognition can be a key factor in determining whether decision-makers seek to prioritise the protection of AV collections against threats, and reflects a growing awareness within PSM organisations of archival collections as having a strategic significance. In recent years, AV archives have become increasingly responsive to changes in the digital media landscape, by which public service broadcasting in particular has come under pressure to maintain the prominence, discoverability and perceived relevance of their content among users/audiences. In turn, there has been a general process by which apps become a more common way to deliver broadcast services and content across a range of devices (e.g. smartphones, tablets), described as the ‘appification’ or ‘appisation’ of broadcast content (Johnson 2020). In this context, video on demand (VoD) services like Netflix or Amazon Prime Video, in addition to existing video sites like YouTube, tend to treat the production date of content as less relevant, with their catalogue interfaces de-emphasising the distinction between newly-produced content and online archive content. As the archives of media organisation increasingly manage YouTube and social media channels, along with providing content to app-based services, there is a growing potential for archives to argue for their strategic importance in providing access to content among broader publics. In what follows, this section, based on interviews as well as desk research, will outline recent patterns in AV archival practices with regard to **access provision, curation practices and public/audience engagement**.

A **2025 EBU report** has noted the multiple types of value inhabited by public service media archives, spanning from cultural memory and identity value (including for minority groups), educational and civic value, research and (data) analytical value, through to creative reuse and production value. Certainly, these statements could be extended to the AV archive sector more broadly, although there are often key differences in legal frameworks, with broadcasting and film archives having a more complex management of copyright licenses and risk assessment, whereas some AV departments at national libraries and archives manage large collections, in some cases due to legal deposit laws. Overall, the EBU report – based on survey data representing the majority of its

members – underscores a general consensus that the value of archives resides in their use and that their content should be made available as openly as possible, within legal, ethical and technical constraints. In this context, it report cites the observation that this requires a navigation of rights involving a “minimizing [of] legal and financial risk while maximizing the value of assets,” as formulated by the [FIAT/IFTA Value, Use and Copyright commission](#). Indeed, a number of archivists interviewed noted that their current audience-targeted strategies via digital platforms had been made possible by new media laws that allowed for more extensive rights agreements to be made, including provisions regarding streaming services and social media publishing.

Access provision by AV archives can vary widely, and sometimes different levels of access provision may be provided for internal users (e.g. journalists and content producers in the case of PSM archives) as opposed to external users such as researchers, educators, creative professionals and the general public. Some AV archives may facilitate users to browse their (basic) catalogue online, and sometimes offer public access services to access archival content on-site at the broadcaster’s own premises (as is the case with [RAI’s regional offices](#)), or in the context of a national audiovisual institute, such as [INA](#) (Institut National de l’Audiovisuel) in France or [Sound & Vision](#) in the Netherlands. Sometimes secure researcher-only access is facilitated through research infrastructures, for instance with the discontinued [LARM Audio Research Archive](#) in Denmark ([now here](#)), [CLARIAH Media Suite](#) in the Netherlands, the Austrian ‘ORF-Archiv’ at the [University of Vienna](#) or the broader European scope of the ongoing [Impresso project](#). In some cases, audiovisual institutes set up distributed access points (e.g. libraries, museums, cultural institutions), as is the case of Hungary’s [NAVA \(National Audiovisual Archive\)](#) or the ‘[Clip Corners](#)’ initiative to provide access to digitised AV collections from the [Wales Broadcast Archive](#) and via the online ‘[Clip Cymru](#)’ portal hosted by the National Library of Wales. Another example of access facilitated by a library is [Royal Danish Library](#), who has taken out contractual licenses with broadcast content copyright holders to make DR’s broadcast archive available online and on-site at the library.

As the above examples indicate, on-site access stations remain a common means of providing access to AV collections at national libraries and archives in the European context, along with museum spaces dedicated to film and broadcast heritage. In the past, access to archival content also sometimes occurred via commercial sales of audio recordings (e.g. vinyl, tape, CD) as well as VHS cassettes and DVD. In the early 2000s, there was a growing enthusiasm amongst film archives to produce ‘critical editions’ with supplementary materials about a film and its archival preservation as a means of contextualisation, such as the “[Edition Filmmuseum](#)” series (Drubek-Meyer & Izvolov

2008, Bursi & Venturini 2008). While some film archives still release critical DVD, Blu-ray and Ultra HD editions (e.g. [British Film Institute](#)), as the DVD format became increasingly obsolete other archives opted instead for access provision using their own websites or free streaming services, such as YouTube, which allowed for less contextual information to be shared than had been possible with DVD and Blu-ray critical editions. In this period, one of the important collaboration cases of access at scale to digitised film heritage was the [European Film Gateway](#) (EFG 1914) project, which since 2013 has allowed for online access to around 3000 films from 40 European film archives that have a connection to World War I.

While public service media archives participated in large-scale digitization projects from around 2000 onwards, and sometimes supported through national bodies (such as in Belgian Flanders with [meemoo](#)), it was initially rare for such digitization projects to necessarily lead to expanded public access. Important exceptions include the 2006 launch of the [INA.fr website](#), with 100,000 hours of audiovisual content, and the 'Images for the Future' (2007-2014) initiative that allowed Dutch broadcast and film collections to be mass digitised, of which a small portion was made accessible to public via the '[Open Images](#)' portal. In addition, the Europeana.eu aggregator portal (online since 2008) facilitated access to roughly [1.2 million digitised audio](#) recordings and [300,000 videos](#) from archives across Europe, allowing for user search results in 25 European languages.

In recent years, European PSM archives not only continued to make great strides in the digitization of legacy formats, along with (automatic) digital ingest of new content into the archive, but also in preparing archive content for on-demand websites, streaming services or standalone archive platforms. The amount of content made available can range from smaller selections through to almost entire historical collections, as is the case of Norway's [NRK Archive](#) content on its streaming service [NRK TV](#). As NRK Archive staff have noted, this large-scale publishing of the archive brings new opportunities for audience engagement, for collaboration and ability to monitor platform data for user preferences. Yet there have also been multiple 'dilemmas,' which have included ethical concerns, logistical challenges, and space limitations in the streaming interface to be able to provide more context on archival content (Fleischer & Bakke 2024: 348-350).

Overall, the interviews revealed an increase in curation activities, with digital platforms also allowing for new audience **access strategies**, whether via streaming platforms or social media accounts, along with open source resources such as Wikimedia (for example [B&G Wiki](#)). For a selected list of European PSM archives that currently have

varying amounts of archival content available via websites, streaming players and separate archive portals (some of which are geoblocked outside of their national context):

- Austria: [ORF On](#)
- Belgium: [VRT Max](#)
- Czech Republic: [Czech Television archive](#), [Czech Radio digital](#)
- Denmark: [DR-arkivet](#), [DR GenSyn](#)
- Estonia: [ERR Arhiiv](#), [ERR Videoarhiiv](#)
- Finland: [Yle Elävä arkisto](#), [Yle Areena](#)
- France: [INA](#), [Lumni](#), [INA Madelen](#), [Data INA](#)
- Germany: [ARD Retro](#) (part of [ARD Mediathek](#)), [ZDF Rufus](#)
- Greece: [ERTflix](#)
- Ireland: [RTÉ Archives](#), [RTÉ Player](#), [RTÉ Radio Player](#), [TG4 Player](#) (TG4 From the Archives), [Carlann TG4](#)
- Italy: [Rai Play](#), [Rai Play Sound](#), [Rai Teche](#)
- Latvia: [REplay.lv](#), [Digital Library of Latvia](#)
- Lithuania: [LRT Archyvai](#), [LRT.It](#), [eKultura](#) (launch in spring 2026)
- Netherlands: [Open Beelden](#), [Media Suite](#), [EYE Film Player](#), [Zoeken B&G](#), [Schatkamer](#) (launch in spring 2026)
- Norway: [NRK TV](#)
- Poland: [TVP VOD](#), [Ninateka](#)
- Portugal: [RTP Arquivos](#), [RTP Play](#)
- Slovenia: [RTV365](#)
- Spain: [RTVE Play Archive](#), [3CAT](#)
- Sweden: [SVT Play](#), [Svensk Mediedatabas](#), [SR-arkivet](#)
- Switzerland: [Memoriav Memobase](#), [Play SRF](#), [Play RTS](#), [Play RSI](#), [Play RTR](#)
- Ukraine: [Suspilne Mediateka](#)
- United Kingdom: [BBC iPlayer](#), [BBC Sounds](#), [BBC Rewind](#), [BBC Archive](#), [S4C Clic](#), [Wales Broadcast Archive](#)

This list does not include the extensive number of social media accounts held by AV archives in the European context, where archival content is frequently being shared via YouTube, Facebook, Instagram and TikTok accounts.

The trend towards **content curation** and **public engagement** described here is consistent with the recent EBU report, which noted that more than half of PSM organisations in Europe are currently posting archival content on social media platforms (EBU 2025: 57), with some AV archives developing multiple accounts on one platform

in order to account for niche interests amongst their audiences (e.g. sport and history for broadcasters, or popular ‘classics’ for film archives). A good illustration of this effort to make digitized content more available can be found in [recent initiatives by the Irish-language broadcaster TG4](#), which has hosted in-person events (e.g. archive pop ups, ‘gems from the archive’ sessions) to increase audience awareness of their archive collections, followed by an initiative to encourage ‘shareability’ on social media via their dedicated [Molscéal online hub](#). During interviews, too, archivists working for smaller broadcasters catering to regional and/or language-specific audiences noted that their remit requires them to be quite agile and audience-centric (e.g. responding quickly to audience requests for online access to archival content), and in several cases, their organisations already invested in innovating web-based players during the mid-2000s to share content with transnational diaspora audiences. Other archivists noted that while steps have been taken to curate content that thematises various forms of cultural and ethnic diversity in European societies, there are also challenges in contending with archival gaps and silences, or in reusing legacy material in new productions or archival curation that may include overt expressions of sexism, racism or other problematic views (cf. Brunow 2017, Özgen 2024). In this context, a striking example of an innovative engagement with sexist content in Spain’s public television archive is the [RTVE Lab’s](#) award-winning interactive project “[Cómo el machismo marcó nuestra adolescencia](#)” (How Sexism Shaped our Teenage Years).

Overall, the trends sketched above can be similarly observed to those described for the INA.fr website, which following its launch 2006 trended to promote more traditional content concerning “commemorations of past events or what happened on a specific date in the past,” but has since shifted more to how current events can be understood using archival content as context to help better explain the present (Pietsch 2024: 4). For instance, one interviewee noted that their broadcast archives team will often prepare archival content ‘packages’ for production teams, in anticipation of certain events or developments, but are also expected to be responsive in the case of sudden developments for which their television news department quickly need historical footage from the archive.

Another curation strategy that several broadcast archivists mentioned was with the launch of TV series set in an earlier decade, which could be contextualized for audiences using archival content. For instance, the Danish DR archive prepared a selection of archival content to accompany release of the [Ungeren](#) (2024), which narrated the dramatic events surrounding the alternative ‘Youth House’ in Copenhagen from 1982 through to police eviction and subsequent demolition in 2007. In this case, an online article was created with [archival photos and radio clips](#) as part of a contextualization

of the events narrated in the series, along with a **curated selection of news items and documentaries** on the 'Youth House.' A similar strategy was adopted by Norway's NRK, for instance, for the TV series *Makta* (2023-2024), a political satire set in the 1970s and 1980s, documenting the power struggles amid the rise of Norway's prime minister Gro Harlem Brundtland. In parallel to the series, the NRK archives team posted a number of **online stories** to contextualise the events of the series, and featured archival content from the real parliamentary debates and press conferences on their **archive section** on the NRK TV streaming platform, which resulted in high audience engagement with this content (Fleischer & Bakke 2024: 350). Several interviewees also noted that when broadcast archives hold photo collections, these supplementary materials can be helpful when creating contextual information to audiences, or when posting archive content on a streaming player, which often requires a small photo tile to profile that programme within the player interface's 'catalogue' display. In addition, such developments have prompted further collaborative projects among AV archives in Europe to develop more inclusive, audience-centric engagement, as evidenced by the EU-funded RECHARGE project devoted to enhancing participatory approaches to heritage collections (Beirigo & Scioldo 2025).

One observation made by interviewees is that considerable time investment is required in order for archives to respond to the strong demand for 'nostalgia' content, often leading to archive curators to assemble thematic selections that connect with certain anniversaries, seasonal events, genres or trends, which might be associated with themes ranging from World War II or Christmas celebrations through to Halloween and apocalyptic films. A prominent anniversary that involved extensive planning at numerous broadcast archives has been recent '100 years of radio' celebrations (along with anniversaries marking the start of television). For the radio centenary, for instance, the DR archives team were extensively involved in the long-term planning of programmes and events connected to this anniversary in April 2025, and allowed for an active role of the archive in selecting, curating and contextualizing archival content for **this year-long celebration** by the broadcaster. For other AV collections, such anniversaries resulted in presentations of historical objects and recordings in exhibition spaces, such as the "**Radio Fever is Coming! Latvian Radio - 100**" exhibition at the **Latvian National Library**, which included QR codes to provide additional contextual information and access to audio recordings via smartphones.

Other archives have placed a strong emphasis on profiling content in sections organised by decade, for instance with heightened audience engagement around popular topics such as fashion, music and popular culture in the 1980s. At NRK, for instance, the 'by decade' feature was initially not possible within the on-demand interface, nor were genres indicated. However, following a request from the Norwegian ombudsman for the elderly, both a list of decades and tiles for genres (e.g. comedy, drama, political programmes) were added (Fleischer & Bakke 2024: 346, 350). This reflects a general need to tailor search interfaces to ensure that specific user groups can access content, but also that contextual information, whether genre labels, tags or descriptions, remain crucial for allowing older material to be understandable and attractive to users. Several interviewees noted that the trend towards curating light and nostalgic content sometimes occurs at the expense of more serious programming, which is a risk that continues to be monitored by those involved with archive curation.

The overall popularity of curating 'nostalgic' content can also be linked to a broader demand for accessing and consuming AV archival content during and after the COVID-19 pandemic. As a [2021 report](#) on the pandemic as a 'driver for change' in the sector has indicated, this surge in demand was not only facilitated via social media channels, but there was also a "growing demand for archival content disseminated via 'traditional' linear television and radio. In some countries, daytime television was expanded to provide more entertainment for people as a way to cope with being cooped up at home" (Drabczyk & Oomen, 2021: 10). Indeed, a number of interviewees noted that limits on broadcast content production during the pandemic also led to gaps in programming, particularly for television schedules. This situation put pressure on some archives teams to work swiftly to identify archived programming that would lead to attractive programming that would interest audiences. In the case of the [Irish-language broadcaster TG4](#), for instance, archival content for past games and matches of the GAA (Gaelic Athletic Association) were secured via rights agreements, sometimes digitised, and then repackaged as "All Ireland Gold," with a total of 36 broadcasts in 2020. In its new presentation, a simple opening clip was followed by a famous former commentator offering a short introduction, before the archived sport match was shown, and resulted in high audience numbers and engagement. Overall, archival content gained increased interest amongst broadcaster producers and schedulers as well as increased visibility among audiences/users, which became a catalyst for further efforts at public engagement during and after the pandemic.

While curation was not traditionally seen as part of the 'core business' of archives, a number of interviewees noted that this focus was also linked to their organisation's strategic plans during the past decade, including the strong ambition of becoming 'digital first' in order to prioritise content being published first for their digital outlets over 'linear' radio and television (Van der Elst et al. 2025). During interviews, several archivists working for larger broadcast organisations noted that the impact of digital-first strategies had required a strong investment on the part of archives teams, with workflows adjusted in order to play a more active role in supporting archive-oriented research and production in an earlier phase within the content production process. At one organisation, a research team embedded in the archive helps productions by suggesting search terms, themes and strategies for finding relevant audio, video and photos across different repositories. The archivist noted that production teams may know radio and television archives well but be less familiar with photographic collections, for which archival staff are often better placed to make cross-collection links. At another organisation, one archive staff member has started to work one day each week with the photography curator, in order to be able to better support increasing need for photographic material to be included with archival content on the streaming platform.

Several interviews highlighted in-house training initiatives that seek to help staff develop new competencies, ranging from commissioning and editorial policy through to podcasting, social media, project management, and video editing. These programmes are often designed to bring archives 'up to speed' with the rest of their organisation's teams, which were already operating in a more digital-born, multi-platform environment. For instance, the BBC established its Archive Curation Team in 2023 in a bid to expand re-use of and engagement with archival collections, and encourage archive teams to develop strong editorial and curatorial skills, which could be deployed when working on collaborative projects such as filmmaker [David Attenborough's 70th anniversary in broadcasting](#). Other interviewees also stressed growing expectations around data and analytical skills. Decisions about what to preserve, digitise, and promote increasingly depends on analysing datasets, yet some archives teams feel their own data skills remain too basic, while access to collection data is frequently brokered through small, over-stretched analytics units. In this context, several argued for both better direct access to data and upskilling within archival teams so that staff can undertake basic analyses themselves, for example to better understand patterns of audience use or to articulate the impact of their curation activities. Yet despite working increasingly with digital-born content, automated ingest and description tools in the archive, one

interviewee noted that dealing with legacy formats, handling unexpected archive donations and the labour of appraisal have not disappeared, as these tasks still remain central to the 'core purpose' of the archive.

For the topic of professional skillsets and training, multiple interviewees stressed how important professional organisations such as FIAF, FIAT/IFTA and IASA have been in the overall process of digital transformation within the AV sector. A substantial number of interviewees (or their colleagues) regularly attend and present at the annual conferences of these professional AV archive associations and noted that those staff members who attend take extensive notes in order to present the latest trends in the field to their archive teams following their return. A number of interviewees had also taken part in professional programmes, such as the **FRAME training programme**, which offers various courses and workshops on various aspects of AV archives management (preservation, digitisation, documentation, access, reuse) and the various legal, technical, logistical, commercial or creative aspects at play. In addition to such professional opportunities for learning and exchange, numerous interviewees mentioned international collaborations and projects, with researchers, AV archives and other heritage partners as productive opportunities for them to not only learn new skills or generate productive outcomes, but also be part of documenting projects and sharing lessons learned with the professional field through presentations, reports, and published articles. Large, multi-partner collaborations within the EU were generally seen as productive experiences by those who had participated in such projects. Several archivists mentioned several ongoing projects about AI tools for AV content discovery (e.g. **MOSAIC project**). Others mentioned projects that explore the societal potential of AV archival collections, as illustrated by the BBC Archive Curation team's recent project on '**Memories and Dementia**,' or another initiative, **Reminiscence Archive** (RemArc), by which a selection of BBC Archive content was used to assist long-term memory for people with dementia.

In conclusion, this section has surveyed some of the recent general developments in 'external relations' as AV archives have increasingly digitised and catalogued their collections and are now exploring how to provide expanded access and public engagement with their archives. In broadcast organisations, the prioritising of a 'digital first' strategy has also led to changes in how archives participate in content production and access strategies, including developing new forms of curated content for streaming services and social media platforms. Overall, these developments have tended to give the archive more visibility as a valuable 'asset' for broadcast organisations, and the COVID-19 pandemic was identified as an important catalyst for increased demand for

archival content in 'linear' broadcast schedules and programme production as well as via digital platforms and related forms of audience engagement. At the same time, it has noted the tendency in curation towards 'nostalgia' content catering to mainstream tastes. The general process of adapting to a multi-platform, digital first production environment has increasingly required AV archives teams to not only maintain existing archival workflows but also invest in the development of editorial, curatorial, data and technical skillsets. Interviewees noted welcome examples of broadcast organisations that had invested sufficiently in the staff and training resources required for this expanded remit of the archive. However, several noted the potential risk of archive staff becoming overworked or that the effort required to maintain curation projects and tasks might become difficult to justify in the event of future budget cuts or reorganisations. This theme of potential risks or threats to the AV archive and its operations is a theme that will be further elaborated on in the following section, which treats the diverse (inter)national pressures facing AV archives, from climate risk and authoritarian politics through to cyber warfare and military conflict.



3

(Inter)national Pressures: Climate Risk, Cyber-Attacks, Political Upheaval and Conflict

This section takes up the question of possible pathways to 'resilient' heritage with an attention to the broader risks that archives face, whether these be related to climate risk, cyber-attack, or connected to the threat posed by political upheaval and military conflict. In other words: What are the larger threats and uncertainties that archives face at present? How can archives anticipate diverse (inter)national pressures? Indeed, recent years have seen a growing concern about audiovisual archives being 'at risk' to various threats, and this section will outline the concrete concerns being articulated for AV archives in Europe today. Firstly, it will discuss fire and **climate-related disaster**, such as floods, while also noting a broader professional debate emerging about eco-responsibility and sustainability. Secondly, it will observe the growing vulnerability of AV archives to **cyber-attacks**, which have grown in scale, and constitute a threat that has significant consequences for archives with large (digital) collections. And lastly, this section reflects on the risk that AV archives face when it comes **political upheaval** and military conflict, in some cases leading to targeted destruction of broadcast buildings, infrastructure and AV collections.

When considering **climate risk**, it is important to acknowledge that fire has long posed a risk to AV collections, and nitrate film stock in particular (the industry standard until the early 1950s) is highly flammable and chemically unstable (Smither & Surowiec 2002). This led to regulation in cinema exhibition and nitrate came to be understood as 'dangerous goods' by film archives (Edmondson 2004: 20, 46). In line with best practice, nitrate collections tend to be held separately from other collections, in controlled temperature conditions. Globally, fires have led to significant losses of film heritage, with recent examples including the National Film Archive of India in 2017 through to multiple fires at the Brazilian Cinematheque in the period 2016-2021, which have been linked to government defunding and neglect (Rashid 2017, Ferreira 2022). Most recently, in the European context, a nitrate fire broke out in Rome that was subsequently attributed to "carelessness" of the archive's management (D'Agostino 2024). More generally, analogue formats in AV archives require a stable temperature and minimized exposure to heat, humidity, and light.

Recently, there has been an increasing attention to the urgent need for archives to prepare for climate change and develop more sustainable approaches to digital preservation (Pendergrass et al. 2019, Antoniazzi 2021). This growing awareness can be seen in recent calls for a **Green New Deal for Archives** (Tansey 2024) and **Climate Action for World Heritage** (UNESCO 2023), and various 'green' initiatives have emerged among **PSM organisations**. In the AV archives sector, there have been clear efforts to develop a growing sense of '**Eco-Responsibility**' within PSM archives, with the FIAT/IFTA broadcast archive organisation encouraging its members to critically consider how archives can reduce their environmental impact and share ideas for more sustainable practices in archiving.

Along with this growing awareness of AV archives' ecological footprint, there has been an expanded conversation about the risks they face in the context of extreme weather events linked to drought, storms, floods, and fires. Already in 2005, the American Moving Image Association published a six-page document on "**Disaster Recovery – First Actions for Film, Tape and Discs.**" A 2024 UNESCO publication **Building Resilience** includes extensive advice on disaster risk management (DRM), with 'best practices' in emergency response and recovery shared by archivists across the Asia-Pacific region, whose institutions have been exposed to severe storms (e.g. typhoons, cyclones), floods, bush fires, and earthquakes. Within this overview, Sanchai Chotirosseranee and Chalida Uabumrungjit (Thai Film Archive) have provided a guide to AV archives to actively link their digitization strategies to DRM plans, and offering a series of recommendations in the area of disaster preparedness, evacuation strategies during a disaster, and disaster recovery, including a checklist exercise for AV archives to evaluate their specific vulnerabilities, disaster plan, digital copies, emergency power supply, backup workflows, recovery procedure, supplies for disaster response, and evaluation protocols (Chotirosseranee & Uabumrungjit 2024).

Shortly after this publication appeared, the FIAF **Disaster Handbook** was released, for which its editor David Walsh offers a definition of a 'disaster' as "any unplanned event which is likely to cause significant loss or damage in an audio-visual collection. This broad definition encompasses events of any scale, from major disasters affecting the whole community or region (such as an earthquake) to local events confined to the institution itself (such as a water leak, theft, or cybercrime)" (Walsh 2024: 9). The handbook includes 10 chapters devoted to preparing AV archivists for a disaster risk assessment, disaster planning, immediate response, and disaster recovery (for film, magnetic tapes, optical disks, paper and photographs). Here too, specific case

studies from global AV archives are included, ranging from fire, floods, storms, and earthquakes. Walsh and his co-author Mick Newnham note that archive organisational structures may have become too rigid and that for disaster preparation, “a more flexible emergency organizational structure [...] may be needed” (Newnham & Walsh 2024: 28). While the exact needs of individual organisations may vary, they offer a template for an emergency plan and a checklist for emergency preparedness. The final chapter of the handbook consists of a detailed outline for how to run a hands-on workshop, “Disaster Response and Recovery,” that is based on simulating a disaster situation with flooding, whereby a group of archivist participants participate in the recovery process for a water-damaged AV collection (van Malssen 2024). In sum, the handbook seeks to raise awareness among those who work with audiovisual archive collections and to encourage institutions to develop a robust emergency plan and overall disaster preparedness.

Secondly, this section now turns to the growing vulnerability of AV archives to **cyber-attacks**, which have grown in scale and frequency, constituting a threat that has significant consequences for archives with large digital collections. Employees of the Cinémathèque suisse recently gave an account of the ransomware attack that their institution faced in mid-September 2021. On 14 September 2021 ransomware software was activated to start an attack and initiate an encryption process. Even though the organisation quickly enlisted the help of a specialist company to isolate and wipe the ransomware, to restart the archive’s IT services, and restore servers and data from backups, significant amounts of work-in-progress were lost (Pourcelot et al. 2024: 165). In their assessment, it is crucial to implement planning both in IT as well as in crisis management. In their case, they developed a Disaster Recovery Plan specifically related to IT response in the event of a cyber-attack, along with implementing AI-powered anti-virus solutions, outsourced monitoring, secure VPN access and mobile phones, employee education and extensive analysis of IT infrastructure. While communication between Cinémathèque suisse staff was restored via private communications means (i.e. WhatsApp, private phones and email accounts), the organisation has subsequently worked to develop a crisis management plan to try to facilitate communication when the usual channels (e.g. email, Intranet, website) are not available (Pourcelot et al. 2024: 167). This cyber-attack did not interfere with the archive’s public film screenings, but was particularly disruptive to the departments responsible for collection management (who could not access the database), and the film department’s digital lab, which could not resume digitization due to some preservation equipment being out of operation for an eight-week period.

While Cinémathèque suisse was able to respond quickly, a more recent ransomware attack on the British Library (BL) was described by the former CEO of the UK's National Cyber Security Centre, **Ciaran Martin**, as “one of the worst cyber incidents in British history.” The hacker group Rhysida took advantage of the BL's remote access server to which unauthorised access was achieved, after which they copied and removed data and encrypted and destroyed infrastructure, before demanding a ransom payment in late October 2023. When this payment was not made, the ransomware group released 600 GB of stolen files to the dark web, including private information of staff and users. The online catalogue was inaccessible until mid-January 2024, and the BL has since issued a general “**Cyber-attack Recovery Update**” page to provide an overview of the **current availability** of catalogues, physical content and digital content. The **Sound and Moving Image Catalogue**, for instance, is currently available as an ‘interim version’ that allows for simple search; only limited digitised audio is accessible onsite to BL users (and video and moving image collections are not yet available).

The BL's management released a paper “**Learning Lessons from the Cyber-Attack: British Library Cyber Incident Review**” in March 2024, which was focused primarily on offering insights into the attack, its impact, crisis response and recovery, technology infrastructure, future risk assessment, and lessons learned. The report details the serious impact of the attack to technological systems (including software systems), whereby the destruction to servers prevented system recovery, and the BL's “unusually diverse and technology estate” with complex of legacy systems, due to past mergers of various collections, also contributed to the vulnerability of BL's systems and thereby the severity of the cyber-attack. In late 2023, the BL board approved strategic plans to coordinate long-term recovery, with the overall aim to achieve a set of goals over an 18-month period, representing an immediate crisis response phase, a 6-month period of implementing interim solutions, and a concurrent phase across the whole period in developing long-term solutions by either upgrading, adapting or introducing systems (“Learning Lessons from the Cyber-Attack” 2024: 12).

Similar to the Cinémathèque suisse, the BL report identifies internal communications with staff as a key aspect to dealing with a critical vulnerability like a cyber incident, given “the need to tightly control information during the early stages of the cyber-attack, and the uncertainties around the resumption of normal services, [which] have caused frustration for researchers and had an impact on staff morale” (3). Going forward, there is also a recognition that the effort to build a more resilient infrastructure and expanded security and risk management processes is not only a technological or policy effort but also requires an investment in a change in the work culture and workflows, which has

been recognised as an explicit ‘change management’ process (16). The report closes with 16 recommendations for other institutions holding major archival collections, which include substantial technological and monitoring (e.g. on-call external security expertise, multi-factor authentication, network segmentation, investment in back-up and recovery capabilities) as well as regular cyber-security and risk training for all staff including senior management, active planning for staff and user wellbeing in the case of cyber-incidents, and improved collaboration and sharing of information with peers in the library and archives sector.

These insights align with recent advice provided to the AV archive sector by representatives of the cyber security company NCC Group: “During a ransomware event, the organization may be given little time to mitigate or remediate the impact, restore systems, or communicate via proper channels. For this reason, it is especially critical to be prepared, which includes educating users, response teams, and decision-makers about the importance of preventing and handling potential compromises before they occur” (Fraser & Archer 2024: 106). In addition to such preparations before a cyber-attack, they provide guidelines for response and recovery steps to enact during such incidents, which they summarise in short as Prepare, Identify, Contain, Recover, Review and Learn, with clear divisions of tasks and responsibilities in each stage (110-116).

At public broadcasters too, there is a strong recognition that cyber security threats are becoming more frequent and intense in nature. The EBU has been particularly active in the past decade, issuing its first recommendation report in 2015 on cyber-attacks, and a further set of recommendations for [mitigating ransomware and malware attacks](#) in 2016, with its most recent iteration on [cybersecurity safeguards](#) issued in 2025. In addition, the EBU has been running its two-day [Media Cyber Security Seminar](#) for a decade, and since its [first edition](#) in 2017, it has been offering tutorials and talks to European broadcast organisations on how to try to reduce the increase in cyber-attacks. The EBU also recently hosted a webinar on the topic of “[How to Run a Cybersecurity Awareness Program](#)” with presentations by information security experts from the BBC and CBC/Radio-Canada designed to help other European broadcasters to develop security awareness within their organisations. Since this video content is restricted to EBU members, it is also worth noting a freely-accessible episode of the [Media Uncovered podcast](#) from 2023 that also interviews two security experts from CBC/Radio-Canada on related topics of cyber security threats to public service media and how to best prepare and respond to such threats. Overall, the EBU was particularly proactive in this domain during the past decade, but the film archival field – particularly

via FIAF, AMIA – has also expanded its critical attention to the risks associated with malware, in tandem with the broader heritage sector, as supported through UNESCO initiatives.

Finally, **political upheaval** and **military conflict** can be considered significant (inter) national pressures experienced by AV archives. As noted in the introduction to this report, there have been various sustained attacks on public service media by populist, far-right political figures and their parties. Such attacks on public service media have been **extensively reported** during the 2010s, along with more recent examples in Europe documented by **Media Freedom Rapid Response** (MFRR) and in statements issued by the **Public Media Alliance** (PMA). These attacks generally occur within a single national context, but more recently, there have been efforts by politicians to sue broadcasters in other countries, including a recent **high-profile defamation lawsuit against the BBC**. Another aspect to such attacks is the desire to not only introduce sweeping budget cuts, but the attempt to entirely halt support for public broadcasting, whereby all funding for a broadcast archive is cut off. One form that right-wing attacks take is in proposing referendums to sharply reduce or cut license fees (e.g. as proposed for **Switzerland**) or to completely abolish public broadcasting (e.g. as implemented in **Liechtenstein** in 2025).

In the United States, **federal funding for public broadcasting** was discontinued in 2025 under the current Trump administration, which prompted the dissolution of the Corporation for Public Broadcasting (CPB), and also directly affected structural support for the American Archive for Public Broadcasting (AAPB). Such national developments can have significant effects globally, as has been the case with the mandate to close USAGM (United States Agency for Global Media). On 14 March 2025, grant terminations were announced for international public broadcasters including Voice of America (VOA), Radio Free Asia (RFA) and Radio Free Europe/Radio Liberty (RFE/RL). RFE/RL, which is headquartered in Prague and broadcasts across Eastern Europe, the Caucasus, Central Asia and the Middle East, **sued the USAGM** a few days later in an effort to block this defunding. In early 2026, the US Congress **allocated** \$653 million for USAGM broadcasters, with this bipartisan spending bill signed by Trump on 3 February 2026. This allocation is still significantly less than the grant received for the 2024 financial year and has led to more cuts, firings and the (planned) closure of several bureaus and language services in 2026. This comes in addition to the effects of the previous cuts and ongoing uncertainty, which resulted in the **extensive furloughing of employees**, closure of language services and loss of significant audiences during 2025. Overall, this example indicates the vulnerability of both national and international services in

the face of right-wing attacks on public service media, and its manifest effects in the European media landscape, where RFE/RL has been broadcasting since 1950. While the reporting of such developments generally does not mention the effect on archives, it can be said that the entire operations of PSM are affected in the context of extensive budget cuts and defunding, which extends from primary content creation, coordination and distribution teams through to archives, IT and administrative departments.

Beyond these examples, military conflict and political upheaval can pose a major threat to AV archival collections, in some cases leading to targeted destruction of broadcast buildings, infrastructure and archives. Historically, this has also been the case, with military invasions during World War II (1939-45) leading to the confiscation, displacement, damage, and destruction of film and radio collections across Europe (Birdsall 2022, Birdsall & Harrison 2024, Harrison 2024). Recent research about AV archives in Southeast Asia has also pointed to the significant losses in audiovisual heritage as a result of military conflict, invasion, and political upheaval, as evidenced in the case of the intentional destruction of film heritage in Cambodia under the Khmer Rouge from 1979 onwards, and in Myanmar following the 1988 coup (Cipriani 2025: 133-134). In this context, European colonialism, World War II and Cold War-era conflict all significantly impacting the formation of AV collections and their vulnerability to war damage and acts of destruction. In recent decades, the 'at risk' status of archives in the context of war and military occupation was less of an urgent concern among AV archives in Europe. However, this issue has become more pressing since the Russian invasion of Ukraine starting in February 2022, which has led to the military targeting of broadcast buildings and threats to AV archives, most notably the **Kyiv television tower** in 2022 and that of **Kharkiv** in 2024. Since then, EU countries have also experienced various security and infrastructural breaches that have been linked to Russia, has heightened fears of military attack elsewhere in Europe, leading to expansions in **bunkers and other protective shelters**, calls to **expand military service programmes**, and recent **multilingual campaigns** calling on civilians to 'think ahead' and to **better prepare for emergencies**.

David Walsh's 2024 *FIAF Disaster Handbook* offers a short entry on the topic of "Armed Conflict and Political Upheaval." He surmises that AV archives may not necessarily be a target for looting or confiscation, yet remain vulnerable, since they might be easily dismissed, or directly targeted due to political or other objections to the content they

contain.¹ Walsh gives a summary of the types of threats to collections that might occur during a conflict situation, ranging from active conflict on site, damage or destruction to archival records and documentation, looting and illegal trafficking, breakdown of infrastructure, military restrictions on physical access, unpredictable changes with governing authorities, contending with population displacement and humanitarian issues (Walsh 2024: 121-122). In his assessment, the key additional precautions that should be made in anticipation of conflict include developing emergency evaluation plans and emergency training for staff, protecting buildings with sandbags, securing valuable items and documentation, and to store copies of digital files and inventories/catalogues offsite.²

While useful in laying out the main concerns, Walsh's three-page entry on this topic of conflict and political upheaval offers more general advice for protecting cultural heritage than for the specific conditions of AV archives, particularly those situated as 'critical infrastructure' such as PSM organisations. Most recently, European broadcasters have become aware that they can learn from Ukraine's wartime media services since 2022. Swedish Radio has already been cooperating with Ukraine's public broadcaster Suspilne since 2018, and its management have made three visits to Ukraine between 2024-2026 in order to better understand [how to run PSM broadcast operations during military attacks](#), and while facing blackouts and security threats. After meeting various Suspilne teams, Swedish Radio CEO Cilla Benkö and Chief of Staff Gabriel Byström collected insights that they drew from their conversations and visiting several backup radio/television production spaces in bomb shelters. The key insights shared from their visits can be paraphrased as follows:

1. **Electricity and mobile networks are military targets** – it's essential to retain control over electricity supplies and have secured access to diesel as large mobile diesel generators have been crucial to maintaining news and information services to the civilian population.

1 In addition to the attacks on European radio and music collections during World War II (Birdsall 2022), there have also been attacks on television archives, as in the case of the [TVN archive in Chile](#), which was purged by General Augusto Pinochet's troops in 1973, since it contained audiovisual materials that documented their crimes.

2 During a recent keynote address at the annual Baltic Audiovisual Archives Council (BAAC) conference, Milda Kvizikevičiūtė (National Library of Lithuania) noted that current geopolitical threats to archives have prompted a professional discussion about pursuing distributed storage of digital collections with partners, yet she noted that this discussion is still in its early stages (Kvizikevičiūt 2025).

2. When electricity and mobile networks are compromised, **radio is the last reliable information source** and becomes a critical infrastructure in emergency situations for civilians.
3. **Mobile phones may be less reliable than radio** – the Internet is a good communications channel if electricity and networks are operational, but in case of a crisis situation, radio is often the most reliable channel.
4. **Access to information should not become a class issue** – the Starlink satellite network, or other solutions with domestic uses of diesel generators, can allow for continued Internet access or charging mobile phones, but not all parts of the population have these options and are often more reliant on radio.
5. **Disinformation is a key part of modern warfare** – Suspilne discovered that prerecorded news or automated playlists on radio are vulnerable to hacks by Russia, which has led to the choice for all news broadcasts to be read out live.
6. It's crucial to have **the ability to quickly transmit from a protected location** in the event of an attack – Suspilne has built simple radio/television studio spaces in bomb shelters near their regular premises, which are easily accessible and well-equipped with food and sleeping facilities.
7. **Decentralisation reduces vulnerability** – Suspilne has decentralized its operations in order to make sure that they can operate under very difficult conditions and still maintain broadcast transmissions, thereby ensuring ongoing access to news and information.

Benkö and Byström note that not all insights might be transferrable, but that they can still benefit from the lessons learned by Ukrainian colleagues and take them on board for Swedish Radio's own contingency planning going forward. Following another visit by Benkö and Byström in January 2026, Suspilne itself also reported that the focus of the conversations during [this more recent Swedish Radio visit](#) turned to questions of continuity of services, touching on topics such as “how constant stress affects people, how newsrooms operate during power outages, changes in planning approaches, digital transformation, and the use of technology and artificial intelligence.” Here, the emphasis was not only placed on emergency response, but [sustaining staff morale and public trust](#) in Suspilne's content in the context of prolonged warfare and blackouts in the lead up to the fourth anniversary since the Russian invasion began in February 2022. The discussions with Swedish Radio not only touched on technical infrastructural challenges, but the [maintenance and protection of archives](#) under war conditions.

A crucial aspect in the article about Swedish Radio's 2026 visit is emphasised in quotes included from Suspilne's management board chair and international cooperation

director, who both underscore how visits from international broadcaster colleagues has an important role in demonstrating international solidarity, but also provides an opportunity to share their own experiences of maintaining broadcasting during war, and to learn from the feedback that international partners share during these exchanges (“Continuous broadcasting” 2026). In Suspilne’s English-language announcements on their website, reference is made to ongoing support [offered by the EBU](#) as well as [similar exchanges with NHK Japan](#), who has facilitated study trips for Suspilne staff to observe how NHK approaches technical operations and archiving during disaster situations in Japan, such as earthquakes (“Representatives” 2026).

In sum, this section has covered various types of (inter)national pressures faced by AV archives more broadly and has brought together some of the specific recommendations and ‘lessons learned’ currently being shared to help better prepare for serious threats, disasters and emergencies. Some of the examples described above are taking place bilaterally between broadcaster organisations, while others are being formulated and published through international organisations such as UNESCO or professional associations such as FIAF or FIAT/IFTA. In the European context, the urgent concerns about diverse threats to AV archives is also reflected in the abovementioned announcement of the [IASA 2026 conference](#), with the title “Archives in Times of Peace and War,” thereby inviting AV archives and their staff to discuss, reflect and share practices relating to the present critical geopolitical moment.

Conclusion

This report has treated recent developments in AV archives and possible pathways to ensuring that they can serve as ‘resilient’ heritage in uncertain times. It has sought to critically reflect on the current position of AV archives in Europe and identify the broader patterns and strategies needed to ensure that they remain ‘future-proof’ in the face of present challenges and potential risks. The first part on ‘internal processes’ showed how crucial core archival workflows are in ensuring the ability for archives to adapt to a landscape of rapid digital transformation, including the potential and challenges of AI. Given that (digital) access is the key requisite for ‘public’ value for AV archives today, the second section on ‘external relations’ outlined how relevance and resilience relies on access strategies, curation and public engagement. And the final section, on ‘(inter) national pressures’ has identified the broader range of uncertainties that AV archives are currently facing and identifying how they can best prepare and mitigate diverse risks, spanning from climate disaster and cyber-attacks through to political upheaval and military conflict. The insights generated in this report, drawing on archivist interviews and desk research, are offered in the hope to prompt further conversation about how archives, and the broader professional sector, can collectively work on ensuring the viability of AV archives as resilient heritage in uncertain times.

In the context of the Netherlands, where the research and writing for this report took place, there have been repeated calls to improve disaster preparedness in relation to cultural heritage, as evidenced by a **three-day event** marking the 70th anniversary of the **UNESCO Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict** on 14 May 2024. On this occasion, the Dutch Chief of Defence, Onno Eichelsheim, indicated that “if a conflict would threaten to escalate into violence, [Dutch] soldiers will not place sandbags around monuments,” arguing that **Dutch civil society has to start preparing to protect cultural heritage**. In response, a first “Action Day for Resilient Heritage” (**Actiedag Weerbaar Erfgoed**) was launched one year later, on 14 May 2025, by a coalition of partners including UNESCO, Blue Shield Netherlands, Cultural Emergency Response and KB National Library of the Netherlands. This action day took as its focus raising awareness amongst heritage institutions about potential threats to their collections, with the KB library head **Wilma van Wezenbeek** noting that “[A]t this point in time, heritage institutions are insufficiently resilient to disaster and

cyber or physical attacks.... [A] resilient collection ultimately starts with awareness. In other words, awareness of the fragility of our heritage and of its transitory nature. This all starts at heritage institutions themselves. You need to reflect on the risks facing your collection and make a plan.” Van Wezenbeek’s call to action were echoed in December 2025, when the (now former) minister Gouke Moes sent a letter to all Dutch heritage institutions calling on them to update their disaster plans.

In response to these calls for improved awareness, and as a component of the larger **AV-DATA** project in which the present report was written, a collaboration took place with the Netherlands Institute for Sound & Vision (NISV) to explore the possibilities for using their ‘Tilt story’ format to create a story that reflects on challenges faced by AV archives today. This digital magazine launched in 2019, with the goal to provide explanation and context on topical issues while using media archival content, delivered in a mobile-specific format to appeal to younger users. This collaboration led to the creation of a digital story “**Heritage under threat**” (in Dutch: “**Erfgoed onder vuur**”) that uses the film, television and photographic collections of NISV (Arentsen & Birdsall 2025). The text on the opening slide is: “Audiovisual collections are vulnerable in uncertain times. How can they be kept safe? And how was this done in the past?” It then introduces some of the key threats faced by AV archives today, before looking at the Dutch history of AV preservation from the late 1930s onwards, when radio archivists had to keep at-risk collections safe during the German military occupation (1940-1945), and developed other preservation and documentation strategies in the decades that followed up until the present. It then ends with a poll where users can vote and a conclusion text. This case is offered here as one example of a possible way to engage both the broader public and archive professionals in the ‘story’ of AV collections, but also the importance of protecting these valuable collections in uncertain times. The collaboration to prepare the story went well, yet it was striking how difficult it was to find usable audiovisual materials depicting broadcast archive spaces in the past, and the overall process of simplifying the storyline and on-screen text for the slides, along with the technical CMS (content management system) preparation, were all quite time-consuming. Nonetheless, there has been a highly positive response to the story, with informal feedback from professionals working at AV archives across Europe that they had discussed this story in their teams as part of a broader conversation about their own curation strategies as well as expanding their organisation’s disaster preparedness in the present moment.

About the Dataset

The AV-DATA project was granted approval (FGW-4597) by the Amsterdam Institute for Humanities Research (AIHR) Ethics Committee on 13 January 2025. All interview participants received detailed information about the project and its commitment to anonymisation and secure storage of research data. All interview participants were also offered the opportunity to check this research report and provide feedback. Interviews were conducted with more than 25 staff working at audiovisual archives from over 15 countries in the European context. While the majority of the interview participants work for public service broadcast archives, colleagues from other types of audiovisual archives were also interviewed, from commercial/independent broadcasters and national film archives through to audiovisual collections within national libraries and national archives. Five of these interviews were conducted on site with staff working at Netherlands Institute of Sound & Vision (NISV) in the period January–June 2025. The remainder of the interviews took place between August 2025– January 2026 (in person and online, using Zoom or Microsoft Teams).

The datasets generated during and/or analysed during the current study are not publicly available, due to explicit agreement with participants to not share the provided data publicly.

Acknowledgements

This research has been carried out as part of the project, “AV-DATA: Developing A Toolkit for AV Collection Histories to Enrich Data and Public Value” (2024-2026) which was granted via the Impact Explorer scheme of the Dutch Research Council (NWO), grant number IMP.EXP.23-24.073 (<https://doi.org/10.61686/FUJWT53665>).

The institutional partner for this project was Netherlands Institute for Sound & Vision (NISV), and in particular I would like to thank Bas Agterberg for his active collaboration and support of this research, and for hosting me as an embedded researcher at NISV in 2024-2025. Among the many NISV colleagues who generously gave their time to answer questions and discuss this research, I would like to thank Saskia Arentsen for her enthusiasm for the project, and for providing the opportunity to collaborate on the development of a Tilt digital heritage story in both Dutch (“[Erfgoed onder vuur](#)”) and English (“[Heritage under threat](#)”).

A warm thanks to the colleagues who served on the AV-DATA project’s international advisory board: Alec Badenoch (Utrecht University), Brecht Declercq (RSI), Emily Clark (University of Amsterdam), Jennifer Vaughn (RFE/RL), and Vincent Kuitenbrouwer (University of Amsterdam), and for additional research support from the Amsterdam School for Cultural Analysis (ASCA) at the University of Amsterdam. Many heartfelt thanks to Peggy Bussink (www.shiftover.nl) for the graphic design.

The project was presented at several events focused on audiovisual archives, for which I’d like to thank the organisers and participants of the IASA annual conference 2024, the FIAF/IFTA world conference events in 2024 and 2025, and the Media Mutations #16 conference (“Unlocking Television Archives in the Digital Era”) in 2025.

Resources & References

Resources

General

- EBU Recommendations - <https://tech.ebu.ch/publications?categoryFilter=recommendations&page=2>
- Media Freedom Rapid Response - <https://www.mfrr.eu/library/>
- Public Media Alliance - <https://www.publicmediaalliance.org/category/news/statements/>
- Share That Knowledge! - <https://sharethatknowledge.com/about/>
- Sound & Vision Publications (Netherlands Institute for Sound & Vision) - <https://publications.beeldengeluid.nl/>

AI, Digital Transformation and Strategy

- Bazán-Gil, Virginia. “Artificial Intelligence Applications in Media Archives” (2023). <https://doi.org/10.3145/epi.2023.sep.17>
- Broch, Louise. “The Current State of GenAI in Television and Radio Archives” FIAT/IFTA (2025). <https://fiatifta.org/the-current-state-of-genai-in-tv-and-radio-archives/>
- Bočytě, Rasa, et al. “The Media Sector on its AI journey: Directions for Experimentation & Implementation.” White paper (2024). <https://publications.beeldengeluid.nl/pub/2200>
- Cecchine, Randi. “Bringing AI into the Audiovisual Archive.” Sound and Vision (2021) - <https://beeldengeluid.nl/en/knowledge/blog/bringing-ai-audiovisual-archive>
- Cecchine, Randi. “The Potential for AI in Audiovisual Archives.” Sound and Vision (2021) - <https://beeldengeluid.nl/en/knowledge/blog/potential-ai-audiovisual-archives>
- Declercq, Brecht. “Neck-deep in Digital Oil? Public Broadcasters’ Archives as AI Training Datasets,” FIAT/IFTA (2024), <https://fiatifta.org/broadcast-archives-as-datasets/>
- Dooley, Bríd. “Digital Transformation in Broadcast Archives: Marrying Theory and Practice – The Journey So Far” (2022) - https://www.youtube.com/watch?v=cceSa_yda8w
- FIAT/IFTA. “Unlocking the Past: a Comprehensive Guide to Managing Rights

and Risks in Audiovisual Archives” (2023) - <https://fiatifta.org/vuc-guide-to-managing-rights-and-risks-in-av-archives/>

- “Public Service Media and Generative AI” (2025). <https://www.publicmediaalliance.org/knowledge-hub/public-service-media-and-generative-ai/>
- Piasecki, Stanisław, and Natali Helberger. “Developing a Checklist for the Procurement of External AI Systems by Media Organizations” (2023). <https://generative-ai-newsroom.com/developing-a-checklistfor-the-procurement-of-external-ai-systems-by-mediaorganizations-8470b3b3a407>

Disaster Planning, Response and Recovery

- *Building Resilience: Disaster Risk Management for Documentary Heritage and Digital Archives; Training Toolkit*. UNESCO, 2024. <https://doi.org/10.58338/NNW1226>
- Cybersecurity for Media Vendor Systems, Software & Services. EBU R 143 Version 3.0. EBU (27 March 2025). <https://tech.ebu.ch/publications/r143>
- “Disaster Recovery – First Actions for Film, Tape and Discs.” AMIA (2005). <https://amianet.org/wp-content/uploads/Resource-Disaster-Recover-First-Actions.pdf>
- *FIAF Disaster Handbook: Disaster Preparedness and Recovery for Audio-visual Archives*. FIAF 2024. <https://www.fiafnet.org/pages/Publications/fiaf-disaster-handbook.html>
- *Incident Response Recommendations and Considerations for Cybersecurity Risk Management: A CSF 2.0 Community Profile*. NIST SP 800-61 Rev. 3. National Institute of Standards and Technology, 2025. <https://doi.org/10.6028/NIST.SP.800-61r3>
- “How can PSM Manage Cyber Security Threats” *Media Uncovered Podcast* (24 April 2023). <https://mediauncovered.podbean.com/e/how-can-psm-manage-the-threat-from-cyber-security/>
- Mitigation of Ransomware and Malware Attacks. EBU R 145. EBU (2 September 2016). <https://tech.ebu.ch/publications/r145>
- “Public Service Media as Critical Infrastructure.” Public Media Alliance (18 August 2025). <https://www.publicmediaalliance.org/public-service-media-as-critical-infrastructure/>
- *Ransomware Risk Management: A Cybersecurity Framework Profile*. No. NIST Internal or Interagency Report (NISTIR) 8374. National Institute of Standards and Technology, 2022. <https://doi.org/10.6028/NIST.IR.8374>

References

- Antoniazzi, Luca. "Digital Preservation and the Sustainability of Film Heritage." *Information, Communication & Society* 24.11 (2021): 1658-1673. <https://doi.org/10.1080/1369118X.2020.1716042>
- Arentsen, Saskia, and Carolyn Birdsall. "Heritage under threat". Netherlands Institute for Sound & Vision (2025). <https://www.beeldengeluid.nl/tilt/heritage-under-threat> [In Dutch: <https://www.beeldengeluid.nl/tilt/erfgoed-onder-vuur>]
- Badenoch, Alec, Clark, Emily, and Marek Jancovic. "Re-bordering the Archive: European Transnational Archives and Transnational Entanglements." *VIEW Journal of European Television History and Culture* 12.24 (2023): 1-10. <https://doi.org/10.18146/view.326>
- Beirigo, Isabel and Carlotta Scioldo. "Enhancing Participatory Approaches in Cultural Heritage Organisations for a More Sustainable and Inclusive Sector," RECHARGE project, 2025. https://www.heritageresearch-hub.eu/app/uploads/2025/10/RECHARGE_PolicyRecommendations_July2025.pdf
- Birdsall, Carolyn. "Tracing the Archival Lives of Radio: Recorded Sound Collections in Belgian and Dutch Radio (1930s-1950s)." *TMG Journal for Media History* 25.2 (2022): 1-30. <https://doi.org/10.18146/tmg.819>
- Birdsall, Carolyn, and Erica Harrison. "Excavating Wartime Sound Heritage of Germany, Italy, and Japan: Captured Axis Sound Recordings in the Washington, DC Area and their Documentation." *IASA Journal* 54 (2024): 8-21. <https://doi.org/10.35320/ij.158>
- Brunow, Dagmar. "Curating Access to Audiovisual Heritage: Cultural Memory and Diversity in European Film Archives." *Image Narrative* 18.1 (2017): 97–110. <https://www.imageandnarrative.be/index.php/imagenarrative/article/view/1486>
- Bursi, Giulio and Simone Venturini, eds. *Critical Edition of Films: Film Tradition, Film Transcription in the Digital Era*. Campanotto: Pasian di Prato, 2008.
- Chapman, Annabelle. "Pluralism Under Attack: The Assault on Press Freedom in Poland." Freedom House Report, 2017. https://www.freedomhouse.org/sites/default/files/FH_Poland_Report_Final_2017.pdf
- Chew, Clarissa. "10 Principles for Inclusive Description" (2022). https://itg.nls.uk/wiki/Ten_Principles_for_Inclusive_Description
- Chotirosseranee, Sanchai and Chalida Uabumrungjit. "Linking Audiovisual Collections, Digitization and DRM Plans." In UNESCO. *Building Resilience: Disaster Risk Management for Documentary Heritage and Digital Archives; Training Toolkit*. Bangkok: UNESCO, 2024, 187-193. <https://doi.org/10.58338/NNW1226>
- Cipriani, Martino. "Audiovisual archiving in mainland Southeast Asia: Analog and

- digital preservation challenges of Thai and Vietnamese film heritage,” PhD dissertation, University of Amsterdam (2025).
<https://hdl.handle.net/11245.1/8cfeea0a-e509-472d-b962-2d93076fb005>
- “Continuous Broadcasting during Wartime: Suspilne Ukraine Shares Experience with Swedish Radio.” Suspilne (13 January 2026). <https://corp.suspilne.media/en/news/60448-continuous-broadcasting-during-wartime-suspilne-ukraine-shares-experience-with-swedish-radio/>
- Davie, Tim. “A Digital-first BBC.” BBC (2022). <https://www.bbc.co.uk/mediacentre/speeches/2022/digital-first-bbc-director-general-tim-davie>
- D’Agostino, Damiano. “Al Centro sperimentale di cinematografia un incendio “segreto” ha distrutto molte pellicole storiche,” Domani, 2 August 2024. <https://www.editorialedomani.it/fatti/incendio-centro-sperimentale-cinematografia-pellicole-distrutte-castellitto-grimaldi-bkxrct56>
- Declercq, Brecht. “Meta-metadata: A Plea for Metadata in Audiovisual Archives.” *Media Fields Journal* (forthcoming).
- Declercq, Brecht. “Neck-deep in Digital Oil? Public Broadcasters’ Archives as AI Training Datasets,” FIAT/IFTA (2024), <https://fiatifta.org/broadcast-archives-as-datasets/>
- Doyle, Gillian, Kenny Barr, and Raymond Boyle. “Public Service Media as Critical Media Infrastructure for the Digital Era.” *Media, Culture & Society* 47.6 (2025): 1132-1149. <https://doi.org/10.1177/01634437251330119>
- Drabczyk, Maria, and Johan Oomen. “COVID-19 as a Driver for Change in Audiovisual Archives: Six Observations from a Virtual Exchange between Professionals.” FIAT/IFTA (2021). <https://publications.beeldengeluid.nl/pub/1862/>
- Drubek-Meyer, Natascha, and Nikolai Izvolov. “Critical Editions of Films in Digital Formats.” *Studies in Russian and Soviet Cinema* 2.2 (2008): 205-216.
- EBU. *Radio Archive Workshop*. Geneva: EBU, 2018. https://www.ebu.ch/publications/activity-report/members_only/radio-archive-workshop
- EBU. *Public Service Media Archives: PSM Safeguarding a Priceless Resource*. Geneva: EBU, 2025. <https://www.ebu.ch/research/membersonly/report/public-service-media-archives>
- Edmondson, Ray. “Audiovisual Archiving: Philosophy and Principles. Paris: UNESCO, 2004. <https://unesdoc.unesco.org/ark:/48223/pf0000136477>
- Eskevich, Maria, et al. “Access to Context: Data-Envelopes for Digital Cultural Heritage in Practice.” DH Benelux 2025, Amsterdam. <https://doi.org/10.5281/zenodo.15462807>
- Ferreira, Fabiana. “Public policies for audiovisual preservation in Brazil and the Cinemateca Brasileira crisis.” *Les Cahiers de muséologie* (2022): 23-40. <https://>

doi.org/10.25518/2406-7202.1070

- Fleischer, Nina Benedicte, and Anne Kirsten Bakke. "The Dilemmas of Sharing: Five Dilemmas when Presenting the Past to the Present." *Journal of Digital Media Management* 12.4 (2024): 338-350.
- Fossati, Giovanna. "Multiple Originals: The (Digital) Restoration and Exhibition of Early Films." In André Gaudreault, Nicolas Dulac, and Santiago Hidalgo, eds., *A Companion to Early Cinema*. Malden: Wiley-Blackwell, 2012, 550–567. <https://doi.org/10.1002/9781118274453.ch28>
- Fraser, David and Paul Archer. "Malware." In David Walsh, ed., *FIAF Disaster Handbook: Disaster Preparedness and Recovery for Audio-visual Archives*. FIAF 2024, 105-119. <https://www.fiafnet.org/pages/Publications/fiaf-disaster-handbook.html>
- Gracy, Karen F. "Documenting Communities of Practice: Making the Case for Archival Ethnography." *Archival Science* 4.3 (2004): 335-365.
- Harrison, Erica. "Activating Displaced Radio Archives: The German 'Loot Collection' (Ko istní Fond) at Czech Radio." *Media History* 30.2 (2024): 223-238. <https://doi.org/10.1080/13688804.2024.2332726>.
- Heftberger, Adelheid. "Access is Not a One-Way Street: The Relation Between Access to Collections and Cataloguing." *Journal of Film Preservation* 107 (2022): 47-52.
- Herlt, Kerstin. "DE-BIAS: Detecting and Cur(at)ing Harmful Language in CH collections." Presentation at BAAC conference: Unlocking Audiovisual Heritage with AI: New Horizons for Archives, Libraries and Museums, 13 November 2025. <https://www.baacouncil.org/past-events/1535-baac-conference-2025>
- Holtz-Bacha, Christina. "The Kiss of Death: Public Service Media under Right-wing Populist Attack." *European Journal of Communication* 36.3 (2021): 221-237. <https://doi.org/10.1177/0267323121991334>
- Johnson, Catherine. "The Appisation of Television: TV apps, Discoverability and the Software, Device and Platform Ecologies of the Internet Era." *Critical Studies in Television* 15.2 (2020): 165-182. <https://doi.org/10.1177/1749602020911823>
- Kvizikevičiūtė, Milda. "From Data to Discovery: The Lithuania eKultura Platform and its Impact on Research," presentation at BAAC conference (Unlocking Audiovisual Heritage with AI: New Horizons for Archives, Libraries and Museums), Vilnius, 13 November 2025
- "Learning Lessons from the Cyber-Attack: British Library Cyber Incident Review." British Library, 8 March 2024. <https://www.bl.uk/home/british-library-cyber-incident-review-8-march-2024.pdf>
- Liarou, Eleni, Carlos, Sylvie, and Matt Green. "Decolonising the BBC Radio Archive: Challenges, Opportunities, Ethics of Care and Access." *VIEW Journal of European Television History and Culture* 14.28 (2025): 1-14, <https://doi.org/10.18146/view.378>

- Manders, Tim, and Mari Wigham. "Metadata Fractures – Don't let them undermine your work." *Sound & Vision Data* [Netherlands Institute for Sound and Vision], 24 January 2024. <https://data.beeldengeluid.nl/showcases/data-fractures>
- Newnham, Mick and David Walsh. "Disaster Planning." In David Walsh, ed., *FIAF Disaster Handbook: Disaster Preparedness and Recovery for Audio-visual Archives*. FIAF 2024, 27-46. <https://www.fiafnet.org/pages/Publications/fiaf-disaster-handbook.html>
- Özgen, Asli. "Screen Memories: The Audiovisual Heritage of Turkish Migrant Women in the Netherlands Across Political Film, Video, and Television." *TMG Journal for Media History* 27.1 (2024): 1-31. <https://doi.org/10.18146/tmg.871>
- Pendergrass, Keith L., et al. 2019. "Toward Environmentally Sustainable Digital Preservation." *American Archivist* 82.1 (2019): 165–206. <https://doi.org/10.17723/0360-9081-82.1.165>
- Pietsch, Jacqueline. "The Audiovisual Archive in an Era of Disinformation and Misinformation." *VIEW Journal of European Television History and Culture* 13.25 (2024): 42-54. <https://doi.org/10.18146/view.334>
- Pourcelot, Didier, et al. "Cyber-Attack at the Cinémathèque suisse in 2021." In David Walsh, ed., *FIAF Disaster Handbook: Disaster Preparedness and Recovery for Audio-visual Archives*. FIAF 2024, 165-168. <https://www.fiafnet.org/pages/Publications/fiaf-disaster-handbook.html>
- Prentice, Will, and Lars Gaustad, eds. "The Safeguarding of the Audiovisual Heritage. IASA-TC 03." London: International Association of Sound and Audiovisual Archives, 2017. https://www.iasa-web.org/sites/default/files/downloads/publications/TC03_English.pdf
- Puglia, Steven, Jeffrey Reed, and Erin Rhodes. *Technical Guidelines for Digitizing Archival Materials for Electronic Access: Creation of Production Master Files – Raster Images*. College Park, MD: National Archives and Records Administration, June 2004. <https://www.archives.gov/files/preservation/technical/guidelines.pdf>
- Rashid, Atikh. "14 years after fire destroyed hundreds of films, lessons not yet learnt." *The Indian Express*, 19 September 2017. <https://indianexpress.com/article/india/14-years-after-fire-destroyed-hundreds-of-films-lessons-not-yet-learnt-4850292/>
- "Representatives of Japanese public broadcaster NHK visited Suspilne Ukraine." Suspilne (13 January 2026). <https://corp.suspilne.media/en/news/59599-representatives-of-japanese-public-broadcaster-nhk-visited-suspilne-ukraine/>
- Schjøtt Hansen, Anna, et al. "Initial White Paper on the Social, Economic, and Political Impact of Media AI technologies." *Zenodo* (2022). <https://doi.org/10.5281/zenodo.13361716>.

- Smither, Roger and Catherine A. Surowiec, eds. "A Calendar of Film Fires," in Roger Smither and Catherine Surowiec, ed. *This Film Is Dangerous: A Celebration of Nitrate Film*. Brussels : FIAF, 2002. 444–453.
- "Suspilne at Four Years of War: Resilience and Trust." Suspilne (26 February 2026). <https://corp.suspilne.media/en/news/62398-suspilne-at-four-years-of-war-resilience-and-trust/>
- Tansey, Eira. A Green New Deal for Archives. Alexandria, VA: Council on Library and Information Resources (CLIR), 2024. <https://www.clir.org/wp-content/uploads/sites/6/2023/07/A-Green-New-Deal-for-Archives2.pdf>
- Taurino, Giulia and Georgia Aitaki. "Television in and After the Archive: Catalogues, Databases, Interfaces and Other Ways to Organize Audiovisual Records." *VIEW Journal of European Television History and Culture* 13.26 (2024): 1-11. <https://doi.org/10.18146/view.353>
- UNESCO. *Policy Document on Climate Action for World Heritage*; UNESCO: Paris, France, 2023. <https://unesdoc.unesco.org/ark:/48223/pf0000390439.locale=en>
- UNESCO. *Building Resilience: Disaster Risk Management for Documentary Heritage and Digital Archives; Training Toolkit* Bangkok: UNESCO, 2024. <https://doi.org/10.58338/NNWI1226>
- van Dalen, Janneke, et al. "How-To: Sharing Knowledge Among Generations of Archivists." *Journal of Film Preservation* 105 (2021): 13-22.
- Van der Elst, Pieter, Catalina lordache, and Tim Raats. "Catching the Waves: The Case of VRT's Digital-first Audio Strategy." *European Journal of Communication* 40.5 (2025): 507-521. <https://doi.org/10.1177/02673231251370877>
- van Malssen, Kara. "An Audio-Visual Disaster Response and Recovery Workshop." In David Walsh, ed., *FIAF Disaster Handbook: Disaster Preparedness and Recovery for Audio-visual Archives*. FIAF 2024, 125-132. <https://www.fiafnet.org/pages/Publications/fiaf-disaster-handbook.html>
- Walsh, David. "Introduction." In David Walsh, ed., *FIAF Disaster Handbook: Disaster Preparedness and Recovery for Audio-visual Archives*. FIAF 2024, 9-12. <https://www.fiafnet.org/pages/Publications/fiaf-disaster-handbook.html>
- Walsh, David. "Armed Conflict and Political Upheaval." In David Walsh, ed., *FIAF Disaster Handbook: Disaster Preparedness and Recovery for Audio-visual Archives*. FIAF 2024, 121-123. <https://www.fiafnet.org/pages/Publications/fiaf-disaster-handbook.html>
- Weerbaar Erfgoed, Nederland – Actiedag 2025 [Resilient Heritage Action Day 2025]. <https://unesco.nl/publicatie/programma-actiedag-weerbaar-erfgoed-2025>

