



Digitisation at Studios 301

CASE STUDY 2

SBS Archives – ¼" Reel to Reel Audio Digitisation



CLIENT:

SBS

PROJECT:

SBS sought an audio digitisation specialist to output the content of 516 ¼" reel to reel audio tapes to 24-bit, 96kHz WAV files in adherence to the IASA TC04 standard.

SIGNIFICANCE:

The collection of tapes is part of SBS' archive of radio programmes in approximately 20 different

languages. This archive is of significant cultural and historical value to SBS and to the broader community.

THE CHALLENGE:

The cultural value of the collection: The collection is highly culturally and historically significant. The tapes comprising the collection have been deteriorating, and digitisation had become urgent to preserve the content.

The technical challenge of the collection: The tapes had not been stored under perfect conditions, so tape baking was required for 75% of the collection. The tapes were in a fragile condition: one of the tapes broke during digitisation, and required splicing. Many of the reels had a large number of splices, which become weaker with baking. In addition, the glue used in splicing tends to ooze over the reeled tape, and this needed to be manually cleaned from several reels.

OUR PROCESS:

SBS delivered the 516 tapes to Studios 301 in batches. We received ten boxes of tapes initially, and then received three boxes of tapes per week, returning the boxes of tapes as we completed work on them.

OUR STATE-OF-THE ART STORAGE AND MASTERING FACILITIES:

We received the tapes into our airconditioned and humidity-controlled facility to begin the delicate digitisation process. Our storage facilities are directly linked to our mastering studio, meaning that the tapes never leave the mastering suite. This guards against degradation and damage, lowers the potential for handling errors, and ensures security and climate control.

OUR BEST-IN CLASS TECHNOLOGY:

We have refined our workflow with each digitisation job to find the optimal combination of old and new technology. Because reel to reel tapes are physically more resilient than cassette tapes, and require a simpler workflow, we were able to deliver the entire job using only Samplitude software for all acquisition and editing.

OUR EXPERIENCED TECHNICAL TEAM:

The quality of the specialists in our technical team allows us to deliver our very high standard of work. Our in-house technicians have dedicated their careers to all aspects of audio production, working across all media - some started their careers four decades ago when the tapes we are currently digitising were new technology. Our digitisation team's knowledge and experience with these media, along with the machines required to play them, allowed us to improvise solutions to the inevitable problems we encountered in digitising the fragile tapes in SBS' collection.



WHAT WE LEARNT ON THIS PROJECT:

This was our fifth major audio archive digitisation job, and it benefitted from the refinements we have made to our processes over previous projects. These refinements have improved our workflow, our project management, and our reporting. Crucially, we aim to capture learnings, efficiency gains and other optimisations in our Standard Operating Procedures (SOPs).



- **ADAPTATION OF WORKFLOW AND STANDARD OPERATING PROCEDURES (SOPS) TO DEAL WITH UNFORESEEN TECHNICAL CHALLENGES**

SOPs are crucial to us because they capture and set our best practice. Because we have a team of technicians working across a number of different studios, we aim to standardise the digitisation process to control for risk, to minimise potential damage to tapes, and to ensure that our clients get a standard and controllable high quality outcome. We revise our Standard Operating Procedures over the course of every job, capturing our learnings. The SBS job was a text book study in applying the international best practice guidelines recommended in the IASA TC04 standards with a 100 percent digitisation success rate.

- **REPORTING**

Formal, cloud-based reporting was done at agreed milestones, for which we developed a bespoke user-friendly front-end. The relationship with SBS was highly trusting and collaborative. We sent an informal courtesy email once a week to update SBS on progress, and to request delivery and pickup of completed batches of tapes.



BENEFITS FOR SBS OF WORKING WITH STUDIOS 301 AS ARCHIVAL DIGITISATION PARTNER:

SBS benefitted from Studios 301's 90-year history of experience in all fields of audio production. Over this time we have developed the facilities, the in-house technical team, the knowledge, the networks and the capacity to digitise collections in all recording formats used in Australia from the mid 20th century to the present. We have retained the machinery necessary to play back all of these formats, and continue to service these machines to retain operability. Because many are obsolete, we machine and hand-make necessary parts to keep them running.

OUR 90 YEARS' OF EXPERIENCE AND TECHNICAL EXPERTISE

As the longest-established recording studio in Australia, we draw on the collective experience of our team of in-house specialists, to meet the unique needs of each job. Our team is experienced working with all industry standard audio editing programs. On this job we used Samplitude software for digitisation and editing.

STRENGTH OF OUR STANDARD OPERATING PROCEDURES

Our robust SOPs mean that we reliably deliver high quality, uniform digital files to the standard our clients expect with no surprises. We incorporate our learnings on each project to refine and standardise our procedures, so that we can guarantee the quality and uniform standard of our work.

SCALABILITY AND FLEXIBILITY OF OUR OPERATIONS

This means no project is too big or too complex for us. Our large facility in Alexandria, Sydney, comprises 16 recording studios, and two bespoke digitisation suites. We have found that communication and flexibility are key to the successful delivery of projects, as unforeseen issues and complexities will always come up. With a collaborative, positive and proactive approach, we draw on our technical expertise to propose appropriate solutions to issues as they arise.

SLNSW JOB SPECIFICATIONS AND ACHIEVEMENTS:

SLNSW PROJECT 1

HOURS OF RECORDING

Approx. 190

TAPE FORMATS

516 1/4" analogue tapes

PROJECT TIMEFRAME

January 2016 - April 2016

ACHIEVEMENTS

First major project for SBS with 100 percent success rate.

THE OUTCOME:

We are pleased to have successfully completed our first major project for SBS. The client was highly satisfied with both our process and the quality of the deliverables. Where SBS previously had a collection of deteriorating tapes, they now have high quality, readily accessible and shareable digital audio files which can be used for broadcast, documentary or research purposes.

