NFSA EOI 2223/P231 – Motion Picture Film Scanners

EOI Document 2 – Statement of Requirements

1. Procurement Summary

1.1 The National Film and Sound Archive of Australia (NFSA) is seeking Expressions of Interest (EOI) from suitably experienced and capable Suppliers to supply and install multiple motion picture film scanners at the NFSA Building in Acton (Canberra), in order to produce high resolution scans of motion picture films to digital files, in line with industry recognised preservation standards.

1.2 For more information, refer to *EOI Document 1 – EOI Purpose and Instructions*.

2. Draft Functional and Technical Requirements

2.1 The draft functional and technical requirements (NFSA Draft Requirements) set out at Table 1 of this document describe the NFSA's requirements as part of this EOI process, being categorised as compulsory ('**must**') and desirable ('**should**').

2.2 Suppliers must set out their suitability to supply, install, and support specialist technical hardware that meets the NFSA Draft Requirements by submitting a Response to the NFSA substantially in the form and format set out in *EOI Document 3 – Supplier Response Form*.

2.3 To help contextualise the NFSA Draft Requirements, the NFSA have prepared a summary of key terminologies and standards that apply to the digital preservation of motion picture film, set out as *EOI Document 4 – Technical Specifications*.

2.4 Responses received by the NFSA as part of this EOI process will be evaluated against the Evaluation Criteria set out in clause 7.4 of *EOI Document 1 – EOI Purpose and Instructions*, having regard for the NFSA Draft Requirements set out in Table 1 of this document.

2.5 The NFSA encourages but does not require that Suppliers provide supplementary information about specialist technical hardware that provides functionality that exceeds the proposed minimum requirements, and/or enhances the NFSA's expedience and capability to digitise motion picture film in delivering upon the AudioVisual Australia project (referenced in clause 2.3 of *EOI Document 1 – EOI Purpose and Instructions*).

2.6 Suppliers are asked to contact the NFSA Contact Officer by e-mail to tenders@nfsa.gov.au should they have any questions or clarifications about the NFSA Draft Requirements, or the EOI process more generally.

Table 1 – NFSA Draft Functional and Technical Requirements

Feature Description	NFSA Draft Requirements
Physical Characteristics	
1.1 Power Supply	The proposed solution **must** adhere to AS/NZS3112 (IEC Type 1) mains plug configuration on 240V.

Feature Description	NFSA Draft Requirements
1.2 Components	The proposed solution **must** include all components (including hardware) required to scan the film as specified.
Film Handling, Monitoring and Outputs	
2.1 Size of Spools	The proposed solution **must** accommodate up to a minimum of 2000ft (610m) of film on 3-inch cores / bobbins in both A & B wind.
2.2 Film Gauges Supported	The proposed solution **must** be capable of supporting 16mm, 35mm, 9mm and 8mm film gauges (all aspect ratios), including the entire frame area, perforations and soundtrack.
2.3 Sound Types Supported	The proposed solution **should** be capable of supporting: - 16mm positive and negative optical composite sound (variable area / variable density) and composite magnetic stripe; and - 35mm composite positive and negative optical (variable area / variable density) - 8mm positive and negative optical composite sound (variable area / variable density) and composite magnetic stripe; and - 9.5mm positive and negative optical composite sound (variable area / variable density)
2.4 Illumination / Light Sources	Respondents **must** specify the type of light source and expected lifespan.
2.5 Camera / Sensor Type	Respondents **must** specify the type of camera or image sensor, method of image resizing, and focal control mechanism.
2.6 Film Transport	Respondents **must** specify the method of film transport used. For example: - pin-registered - sprocket or capstan driven
2.7 Per cent (%) of Film Shrinkage	The proposed solution **must** be capable of supporting up to 4% degree of film shrinkage and have the ability to play and scan deformed and damaged film formats.
2.8 Suitable Film Handling of Archival Film	The proposed solution **must** provide film transport appropriate to safely handle damaged and deteriorated film including buckle, warp, tears, poor splices or damaged perforations.
2.9 Film Transport Speeds	The proposed solution **must** support archival film speeds including but not limited to 16, 18, 24 and 25 frames per second (fps).

Feature Description	NFSA Draft Requirements
2.10 Image Capture Format	The proposed solution **must** be capable of meeting the NFSA's preferred preservation formats for 16mm, 35mm, 8mm and 9.5mm (refer to *EOI Document 4 – NFSA Preservation Digitisation Standards for Film).*
2.11 Sound Capture Format	The proposed solution **must** be capable of directly encoding the soundtrack to meet the NFSA's preferred preservation formats for sound (refer to *EOI Document 4 – NFSA Preservation Digitisation Standards for Film).*
Operating System and Hardware	
2.12 Operating System	The proposed solution **should** use the Windows 10 operating system. The proposed solution **may** use the MacOS operating system (Version TBC). The proposed solution **may** use the Linux operating system (Version TBC).
Networking and Storage	
2.13 Network storage	The proposed solution **should** be capable of using network attached storage.
2.14 Digital Storage	The proposed solution **must** include local media storage separate to the system drive, with capacity to hold at least 10 hours digitised content at full resolution.
2.15 Networking Capability	The proposed solution **must** include a minimum of 1 Gb/s Ethernet network connectivity.
Support and Maintenance Services	
3.1 Installation and Training	The proposed solution **must** include installation and initial training.
3.2 Warranty	The proposed solution **must** include a warranty period.
3.3 Support	The proposed solution **must** include an agreed support term.