Request for Proposal (RFP)

Digitisation of Various Audio-visual Formats
VHS Tapes and 1 Inch Tapes

Content

1. Definitions

In this document, the following terms are defined:

Contract	The legal agreement between RDL and the Service Provider to supply services in the Contract and RFP, including modifications and attachments
Collection of Items	The event, where all of the original information carriers (tape, disc, etc.) supplied by RDL, are picked up at RDL by the Service Provider
Deliverables	The digital files (including metadata files and md5 checksum files) produced from original media in accordance with and conforming to specifications agreed upon in the Contract and RFP
Deliverables' File Formats	The required file formats of the Deliverables
Delivery of Files	The event where all Deliverables are received by RDL
Item	The original information carrier (tape, disc, etc.) supplied by RDL from which a digital copy is produced by the Service Provider
Partial Delivery	The event where a subset of the Deliverables are received by RDL
Preservation File	The Preservation File, which is a result of the initial digital capture/transfer
Request for Proposal (RFP)	The description, prepared by RDL, of the required services to be supplied by the Service Provider
Return of Items	The event where all original information carriers (tape, disc, etc.) supplied by RDL, are returned to RDL by the Service Provider
Service Provider	A company submitting a proposal in response to the RFP
Test Sample Delivery	The event where the Deliverables serving as test sample is received by RDL
Work Day	Monday to Friday except for Danish state holidays, the Danish Constitution Day, Christmas day, New Year's day and the following weeks: week 42 and week 52

2. Introduction

Royal Danish Library (hereafter called RDL) has physical collections with an extensive amount of audio and video recordings. Parts of these will be digitised in-house whereas some media digitisation must be outsourced. RDL has examined its collections and selected a number of Items for digitisation this year. Only Items with unique, preservation-worthy Danish cultural heritage have been chosen for digitisation.

2.1. The Scope of the Assignment

The purpose of this Request for Proposals (RFP) is to identify and select a Service Provider who can facilitate the following:

- Digitisation of one or more of the formats mentioned in section 2.2 (Selected Items for Digitisation) to the Deliverables' File Formats specified in section 4.4 (Deliverables' File Formats).
- The entire logistics process from Collection of Items to Delivery of Files and Return of Items.

An assignment can include one, more or all of the formats mentioned in section 2.2 (Selected Items for Digitisation), but the optimum solution will be digitisation of all formats by a single professional partner.

For each format, the cost of the assignment must specify a unit price per Item. The offer must also include the unit price of any additional services, i.e. repair of broken Items, reconditioning etc. (see section 6.1. Prices).

In case of any discrepancies between the Contract (including the RFP) and the Service Provider's proposal, the terms of the Contract and will take precedence.

2.2.   Selected Items for Digitisation

Format/batch	Content & Age	Estimated Number of Items	Estimated Minutes in Average (per Item)	Estimated Hours in Total
VHS/batch 1	TV broadcast from 2001 - 2003	3700	240	14800
VHS/batch 2	Various event recordings and miscellaneous content (age unknown)	740	Unknown	Unknown
1 inch open reel video - type A	TV programmes from approx. 1971-1987	75	25	31

The number of Items to be digitised is an estimate. RDL reserves the right to reduce or increase the number of Items by maximum 20 % while retaining the unit price.

The condition of the VHS/batch 2 and 1 inch video tapes is unknown, since they have not been handled (except for labelling) since acquisition. All Items are currently stored under dry and cool conditions (around 38%RH and 17°C), but some of the Items might show signs of deterioration.

There are no reliable time codes and run times on the Items or their covers, so technical and human observation will be needed during digitisation of the Items.

The Items and/or covers of the Items are labelled with a bar code and/or unique number.

3. Timeframe

The assignment will commence in October 2018 and is scheduled to be completed by 17 December 2018.

Event	Date	Initiator
Deadline for submitting questions to RFP	9 October 2018	Service Provider
Deadline for submitting proposals	12 October 2018 at 11.30 am	Service Provider
Review process (may include questions to Service Providers)	Expected 12 October - 22 October 2018	RDL

Service Provider(s) selected and Contract(s) awarded	Expected 22 October 2018	RDL
Contract signed	Expected 26 October 2018	RDL and Service Provider
Collection of Items	Expected between 29 October – 1 November 2018 (Exact date to be determined by Service Provider. The Collection of Items must take place on a Work Day)	Service Provider
Deadline for Delivery of Test Sample(s)	7 November 2018	Service Provider
QC of Test Sample(s)	Expected 7-12 November 2018	RDL
Response to Test Sample(s)	Expected 12 November 2018	RDL
Deadline for Partial Delivery	23 November 2018	Service Provider
Deadline for Delivery of Files	30 November 2018	Service Provider
QC of Partial Delivery and Delivery of Files	Expected 23 November - 14 December 2018	RDL
Response to Delivery of Files	Expected 14 December 2018	RDL
Deadline for invoicing	17 December 2018	Service Provider
Deadline for Return of Items	17 December 2018	Service Provider

4. Awarding of contract

The contract will be awarded to the service-provider that has submitted the overall "economically most advantageous bid" on the basis of the following award criterion:

"Best relationship between price and quality"

In the assessment, weight will be given to the following sub-criteria:
1. Price
2. Quality

Re 1) Price
Service Providers must either use the pricing form in Appendix A, or create a new table with the same structure and headings in the pricing form in Appendix A, to submit their pricing. A fixed base price for each Item must be provided in the pricing form. As a minimum, the base price must include all required services described in this document, except for transport and logistics, where the price must cover the transport and logistics services described in this document, for the entire shipment. The proposal must also include the unit price of options/additional services (i.e. additional metadata creation, baking, cleaning, repair, external hard drives for delivery etc.). When stating these additional services the Service Provider must indicate whether the service is included or excluded in the base price.

Prices do not include any VAT. No VAT will be charged.

Re 2) Quality
The response to the requirements specification will be assessed in terms of RDL's actual needs in terms of the preservation of cultural heritage, with the following priority:

1. Digitisation Process
2. Metadata
3. Quality Assurance (QA) and Quality Control (QC)
4. Deliverables' File Formats
5. Delivery
6. Logistics, Safety, Handling, and Storage

5. Requirements Specification

5.1. Digitisation Process

#	Requirements
1	If an Item is too defective to be digitised, this must be documented in a list of not digitised Items together with a possible reason for this. An Item that is not digitised cannot be included on the invoice.
2	As part of the Delivery of Files, the Service Provider must supply a final report with an overview of results (e.g. amount of Items digitized, rejected, cleaned, repaired etc.) and general findings from the digitisation process.
3	The machines used must be in good condition and machine heads must continually be kept clean during the entire digitisation process.
4	After the operator has inserted an Item in the VTR/replay equipment the Item must be played for a few minutes to check the following parameters when applicable: ➢ There is a significant risk of unwanted audio timestamps on the broadcast VHS tapes, steps must be taken to avoid these timestamps on the Deliverables ➢ RF level and general condition ➢ The audio and/or video level ➢ Presence of « drop outs » ➢ Number of audio tracks ➢ Vertical and horizontal sync ➢ Servo lock
5	For VHS and 1 Inch: The entire content of each Item must be converted into a single Preservation File.
6	The Service Provider must describe the processes that will be used to ensure the entire content of each Item is converted into the Preservation File.
7	For VHS and 1 Inch tapes: Signal handling on the machine must be set so that both highlights and shadows are fully rendered (Gamma). Likewise, colour adjustment must be set to match the colour bar of the tape material (Chroma).
8	For VHS and 1 Inch tapes: The Preservation File must have a few seconds of black screen leading in and out of the content.
9	For VHS and 1 Inch tapes: Digitisation must be done in 'overscan' mode to include the entire image field.

5.2.   Quality Assurance (QA) and Quality Control (QC)

#	Requirements
10	When applicable the manual QC must at minimum include attention to the following details: ➢ The aspect ratio must be the same as the source Item. ➢ All Deliverables must play properly. ➢ Artefacts that were not in the source Item must not appear in the transfer. ➢ The entire content must be transferred without clipping, cropping, or trimming. ➢ There must not be any change to the audio or video of the file. ➢ The technical characteristics of the Deliverables must be in accordance with the specifications outlined in this document. ➢ The Deliverable must have the same interlacing as the source Item. ➢ Audio and video sync must always be checked and confirmed. ➢ All labels and metadata (embedded and external) must be compared and checked for completeness – The Service Provider must check and ensure that Items are in the same covers at the Return of Items as they were on the Collection of Items.
11	An automated quality analysis report must be generated for each digitisation.
12	The proposal must include a detailed description of QA processes (maintenance and check of equipment), QC processes and quality analysis supplied by the Service Provider.
13	The proposal must include a technical report of machines, converters, software, including version, models and settings to be used for each format.

5.3.   Metadata

5.3.1. Technical Metadata

#	Requirements
14	The proposal must include a list of possible technical metadata for the digitisation. The Service Provider must as a minimum supply the following technical metadata for each digitisation: ➢ File container ➢ Codec ➢ Bit depth ➢ Colour coding (when applicable) ➢ Number of sound channels ➢ Length of the file ➢ File size ➢ MD5-checksum of the media file

#	Optional
1	➢ Bit rate ➢ Time code (e.g. code type, time start etc.) ➢ Sampling information (e.g. sampling rate, sampling size, word size, number of frames etc.) ➢ Sound qualities (e.g. sound field, noise reduction, equalisation etc.) ➢ Picture qualities (e.g. signal format, aspect ratio, scanning format, frame size, frame rate, colour etc.) ➢ Note

5.3.2. Process History Metadata

#	Requirements

15	The proposal must include a list of possible metadata from the digitisation process. As a minimum, the following manual actions must be logged for each:
	➢ Visual inspection, including comments (date, time, outcome, operator, etc.)
	➢ Cleaning, including comments (date, time, operator, outcome of machine, notes etc.)
	➢ Repair, including comments (date, time, operator, outcome, notes etc.)
	➢ Digitisation, including comments (date, time, operator, SN of VTR, outcome, notes etc.). When applicable digitisation comments must also include:
	    ➢ Saturated audio
	    ➢ RF level (low/OK)
	    ➢ Noisy picture (yes/no)
	    ➢ Drop out (yes/no/where)
	    ➢ Head clogging (sizing)
	    ➢ Tracking issue (yes/no/where)
	    ➢ Audio level and quality
	    ➢ Additional cleaning/ baking/repairing actions
	➢ Use of machines, converters and software, including version, model, serial number, operating system and settings used for above-mentioned actions, including comments (date, time, operator, outcome, notes etc.).
	➢ Manual QC of Deliverables, inspection including comments (date, time, operator, outcome, notes etc.)

16	As mentioned previously (requirement 15, section 4.2 Quality Assurance (QA) and Quality Control (QC)), an automated quality analysis report must be made for each digitisation. The report must include relevant digitisation metadata and, if possible, state minor errors, e.g. a minor dropout in a single sequence, including a time stamp.

5.3.3. Source Metadata

#	Optional
2	➢ Physical format & version (e.g. VHS, 1 Inch Type A, etc.) ➢ Stock brand & version (e.g. Sony, BASF, Maxell, etc.) ➢ Stock duration ➢ Recording method (analogue/digital) ➢ Duration ➢ Dimensions (e.g. height, length, width, diameter, etc.) ➢ Material (e.g. plastic, vinyl, metal, etc.) ➢ Item condition (e.g. scratched, sticky shed, mold, sound distortion etc.) ➢ Container condition (e.g. scratches, unclosable, cracked etc.) ➢ Time code (i.e. code type, time start) ➢ Sound qualities (number of channels, sound field, noise reduction, equalisation) ➢ Picture qualities (e.g. signal format, aspect ratio, scanning format, frame size, frame rate, colour etc.) ➢ Source Item notes ➢ Subtitling ➢ Captioning ➢ Chroma subsampling

5.4. Deliverables' File Formats

5.4.1. VHS and 1 Inch Tapes

#	Requirements
17	The file format of the digitised 1 inch tapes and VHS tapes must be in MPEG2 422@ML, I-Frame, 50Mbps, with mpg2 audio stream, 48000 Hz, stereo, s16p, 384 kb/s, delivered as transport stream with the filename extension ".ts".

5.4.2. Metadata

#	Requirements
18	All associated metadata, i.e. quality analysis report, digitisation process metadata, technical metadata etc. must be in XML.

5.5. Delivery

5.5.1. File Naming

#	Requirements
19	Each file and associated metadata, including the quality analysis report, must be named according to the labelled barcode on the source Item's cover (e.g. 400027908663.ts, 400027904172.wav, 400027904172_meta.xml, 400027904172_report.xml). If no barcode is present, the file and associated metadata, including the quality analysis report, must be named according to the unique number on the cover and cassette

5.5.2. Directory Specifications and the Secure Transfer of Files

#	Requirements
20	A fixity check must be conducted before the Delivery of Files and the checksum files must then be delivered together with the digitised files. The checksum files must be named according to the labelled barcode on the associated Item's cover, e.g. 400027908663.md5, 400027907685_1-a_flat.md5.

All files associated with the digital file should be maintained in a single directory without subdirectories. A typical upload directory should include the following components, and likewise be given the name of the Item's barcode:

< barcode>.<filename extension> for the Preservation File
< barcode_meta>.xml for the metadata file (can be split into two or more files, if necessary)
< barcode_report>.xml for the quality analysis report file
< barcode>.md5 for the checksum file

On the condition that each of the digital files are delivered with the required metadata (see section 4.3. Metadata), and in the required format (see section 4.4. Deliverables' File Formats), metadata may be structured in any way suitable to the Service Provider. With the exception of the quality analysis report, metadata for each digital file should be delivered in a single XML file, if possible.

5.5.3. Test Sample

#	Requirements
21	With the exception of 1 Inch tapes, the Service Provider must deliver a test sample with the first 20 Deliverables of each format/batch. The Items which are included in the Test Sample will be chosen by RDL and the Test Sample must be digitized utilizing the same process as will be used throughout the project.
22	For 1 Inch tapes: The Service Provider must deliver a test sample with the first 10 Deliverables.
23	The Service Provider will not begin digitization of Items that are not part of the Test Sample before approval from RDL.

RDL reserves the right to withdraw from the Contract upon our evaluation of the test sample(s). If RDL chooses to withdraw from the Contract, only the Deliverables from the test sample(s) and logistics will be paid for. RDL also reserves the right to withdraw from parts of the contract regarding one or more format/batch upon our evaluation of the test sample. According to the timeframe regarding the test sample(s) RDL will decide whether to continue the assignment.

5.5.4. Delivery Method and Schedule

#	Requirements
24	The Deliverables must be delivered to RDL either on hard disks or via FTP.
25	The Test Sample Delivery must be carried out before 7 November 2018.
26	A Partial Delivery that constitutes at least 50% of the Delivery of Files must be carried out before 23 November 2017.
27	The Delivery of Files must be carried out before 30 November 2018 and all costs be invoiced before 17 December 2018, see also section 6.2 (Penalties for Late Delivery of Files) in the Contract.

RDL must notify the Service Provider on approval/rejection of the Delivery of Files within 10 Workdays after the Delivery of Files. An invoice cannot be issued until RDL has approved the Delivery of Files, see also section 6.3 (Invoicing Schedule) in the Contract.

5.5.5. Return of Digitised Materials

The deadline for the Return of Items is 17 December 2018 regardless of RDL's approval or rejection of the Delivery of Files.

5.6. Logistics, Safety, Handling, and Storage

The Service Provider is expected to propose solutions for completion of the assignment from start to finish. It is important that all procedures are risk assessed and that the routines to the furthest possible extent take into account that the Items are considered cultural heritage and some contain person sensitive information.

#	Requirements
28	As mentioned earlier (see section 2.1. The Scope of the Assignment), the Service Provider must be responsible for the entire logistics process from Collection of Items to Return of Items and Delivery of Files. The Service Provider bears all responsibility for all risks the Items are exposed to, from the time the Service Provider starts to pack the Items for storage and transport, to when the Items are returned to RDL, and RDL has acknowledged receipt.

#	
29	A proposal must include specifications of routines in connection with transportation and handling of the Items to minimise any possible risks.
30	For the duration of the project, the Items must be stored in a climate-controlled and highly secured depot (fireproof and locked) that meets the standards for archival storage.
31	The Service Provider must ensure that: ➢ Items are not lost in the process, ➢ Items are not damaged in machines, ➢ Items are not damaged by improper handling or storage (climate requirements: <+22oC and <55% RH (preferably <+19oC and <45% RH)), ➢ Items are not exposed to inappropriate changes in climate conditions, shock, etc., ➢ Items are secured against theft, weather and other threats, ➢ Each Item must be insured at a value of at least €250 from Collection of Items to Return of Items, as the content is unique cultural heritage, ➢ Data exchange between RDL and the Service Provider is secure, ➢ A backup of data is kept for at least 60 days after the Delivery of Files, so that a full re-delivery is possible. After approval of Deliverables RDL will ask for the deletion of all Deliverables and all digital copies in the Service Provider's possession. The deletion must then be done as soon as possible after the 60 days have passed from the date of the Delivery of Files.

RDL's statement of receipt does not preclude RDL from later lodging a complaint, if it is found that the returned Items are not in the same extent or condition as they were, before the packing had commenced.

5.6.1. Transportation of Items

#	Requirements
32	The Service Provider is responsible for making sure that the transport vehicle is climate controlled (can maintain climate requirements: <+22oC and <55% RF (preferably <+19oC and <45% RH)) and of sufficient size to allow easy and efficient loading. One or more climate logging device(s) may be packed with the Items at the Collection of Items and must in this case be packed in the same way at the Return of Items.
33	The Service Provider must also ensure that no stops are made, that the transport vehicles are only transporting the Items from RDL, that a direct route between RDL and The Service Provider is chosen and that the Items are not transferred between vehicles.
34	The Service Provider cannot use a third party logistics company, without written approval from RDL
35	The Service Provider must also ensure that the licence plate number of transport vehicles are communicated via email to RDL at least one workday before Collection of Items.
36	The Service Provider must also ensure that transport vehicles are never left unattended and refuelling happens before transportation.
37	All shipments must be scheduled for delivery only on contiguous Work Days to ensure that Items are not left in an unregulated environment for an extended period of time. The Service Provider must conduct the Collection of Items between 10 am and 2 pm on a Work Day. The Service Provider must announce the date for the Collection of Items 3 days in advance.
38	The driver sent by the Service Provider must sign for the reception of intact Items (an Item list specifying the barcodes and packaging of the Items will be provided by RDL).
39	Once the Service Provider has transported the Items to the facility of the Service Provider, all the Items must be scanned, and a list of scanned Items must be sent by email to RDL.

40	After the digitisation - and before the return shipment - the Service Provider must check the order, number and condition of the Items and match these against the numbers that were registered at the reception of the Items.
41	The Items must be returned in the same order listed on the Item and packaging list (an Item list specifying the barcodes and packaging of the Items will be provided by RDL on the date of the Collection of Items).

RDL can provide cardboard boxes for the transportation of Items, but the Service Provider may also supply their own containers if needed.

6. Submitting Proposal

Service Providers submitting a proposal for the project must provide the following information. Written proposals - format at the discretion of the Service Provider – must address the requirements listed in this document, including:
- The Service Provider's QA and QC procedures, and how they satisfy the requirements listed in Section 4.2 (Quality Assurance (QA) and Quality Control (QC)),
- Description of Service Provider's facilities and equipment, detailing that they meet the criteria listed in Section 4.2 (Quality Assurance (QA) and Quality Control (QC)),
- Information on known digitisation issues related to the format(s) in question (i.e. issues related to age, format variations, duration/capacity, manufacturer or the like, which should be taken into consideration when digitising the format(s)),
- Name, address, email address, telephone number of the primary and secondary contact at the Service Provider's company, and
- A minimum of three references from other institutions for which the Service Provider has completed comparable work.

Interested Service Providers should provide direct responses to the requirements stated herein, providing requested documentation, evidence, samples, information on workflows, staffing, facilities, equipment, processes, and protocols that demonstrate appropriate capabilities, acknowledgement, and compliance. Proposals should be emailed to llo@kb.dk no later than 12 October 2018 at 11.30 am.

6.1.   Submitting Metadata Sample Files (Optional)
Service Providers who submit proposals in response to this RFP are encouraged to attach a metadata sample file in their proposal. The metadata samples should fulfil metadata requirements detailed in this document, but may be populated with placeholder information. Service Providers are welcome to suggest other relevant metadata not specifically required by this RFP, and these should also be included in the metadata sample.

6.2.   Questions about the RFP
Service Providers submitting a proposal for the project may ask questions about the RFP in order to gain clarity or details. Please provide questions in writing to the project's primary contact at llo@kb.dk. Responses will be provided up to and including 9 October 2018. All questions and responses will be shared at https://www.statsbiblioteket.dk/om-statsbiblioteket/udbud/udbud.

6.3. Appendices

If Service Providers submitting a proposal wishes to include any other material not specifically requested by this RFP, they may do so by including additional appendices in the proposal.

6.4. Selection of Service Provider(s)

RDL will evaluate all Service Provider responses to this RFP using the requirements and project specifications described in this document. Pricing, experience, quality and fulfilment of requirements will be prioritised in the evaluation.

RDL might contact specific Service Providers to clarify information submitted in the Service Provider's proposal.

All Service Providers submitting proposals in response to this RFP are expected be notified as to the final determination of their proposal no later than 22 October 2018.

7. Payment

7.1. Prices

The Service Provider will deliver in accordance with the prices stated in Appendix A (Pricing Form). These prices and the delivery date will not be changed if RDL provides up to 20% more Items.

Prices do not include any VAT. No VAT will be charged.

RDL must approve any additional services that induce a deviation from the base price in advance in writing.

8. Contact Information

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9. Appendices

Appendix A: Pricing Form