The scope of work shall include:

(A) Pre-Scanning; (B) Scanning and Digitization; (C) Post Scanning; (D) Storage and backup

(A) Pre-Scanning:

- 1. Service Provider will perform all the pre scanning activities which may include (but not limited to) collection of medical record documents, removal of unwanted dust, removal of tags, pins, threads, rubber bands, application of curative techniques to biologically infected or otherwise damaged medical record documents etc., sorting and numbering of pages in the document file in correct order.
- 2. The medical record documents would be handed over in lots as agreed mutually between the Service Provider and the HAHC. The Service Provider shall provide acknowledgement of number of medical record documents and number of pages in each document received from the HAHC. Number of medical record documents/ pages in a file shall be checked in presence of the representative of the HAHC.
- 3. The Service Provider will maintain a record of the document details in a log register.
- 4. Service Provider shall maintain and return the medical record documents in their original form to the HAHC. Document shall be handled with extreme care so that their chronology is not disturbed.
- 5. The Service Provider will carefully unfold and flatten the medical record documents to eliminate creases and wrinkles and ensure that document maintain its original form without any damage.
- 6. Any damage to the medical record documents shall make the Service Provider liable for penalty.
- 7. The Service Provider will take special care in preparing the medical record documents which are too old and that may not be in good physical condition or are very delicate and may not be directly scanned. This may include (but not limited to) pasting of torn pages, straightening of pages, un-binding of files that cannot be scanned directly. Some old medical record documents may require flat-bed scanners too. Service Provider may use ironing process to straighten them. Medical record documents should be prepared such that normal scanner can scan it.
- 8. Service Provider shall be responsible for any damage caused by them during the process of scanning and digitization of records and ensure that all such records are repaired at their own cost and information is retrieved. In case such retrieval of data or repair of record is not feasible the Service Provider will compensate for the same by making payment to the HAHC towards the value of the damaged or lost/data/document/record as valued by the HAHC.

(B) Scanning and Digitization:

1. Scanning resolution shall 200/300/400/600 dpi or better as per S.O., raw master image uncompressed and clean master image loss less compression shall be in file format Tiff 6.0 or better.

- 2. The scanned medical record documents shall be converted into any of the standard file formats such as PDF/1A or other standard formats as per the requirement of the Buyer. All the pages of a single file must be stitched together to generate an exact replica of the physical file. The stitched document should be represented in a PDF/1A format or any other standard format as per user requirement.
- 3. The Service Provider will be responsible for quality assurance and will go through all medical record documents to see if they are complete and legible. The Service Provider will undertake Quality Assurance processes for all aspects of processing and post-processing of records including image capture, indexing, storage and return. The Service Provider's staff will perform quality control to ensure that each page is fully rendered, properly aligned, and free of aliasing/ distortions. Inspection and quality control data shall always be recorded on the worksheet accompanying each volume. When necessary (e.g., poor image capture of an illustration), the staff will re-scan from the original text and insert the image(s) into the proper image file sequence. Service Provider shall employ automated quality analysis mechanism to ensure 100% percent quality check.
- 4. Annotation and bookmark for relevant pages is to be recorded in the PDF files and stored as separate attributes in the database for search.
- 5. Metadata of each file / record is required to be recorded i.e. approx. 15 to 20 fields.
- 6. Metadata should be exported in XML format with other details of the PDF file as and when required.
- 7. If applicable the Service Provider shall perform the OCR or any Technology on the document with 100% accuracy so that the medical record documents can be searched using the text in the document.
- 8. The Service Provider shall ensure that the quality of scanned images is enhance to the optimum level and shall perform all such activities required to bring the scanned image to optimal level such as skew, de-skew to make the image straight, cropping and cleaning of images like removal of black noises around the text and providing equal margins around the text etc.
- 9. In case the medical record documents are not legible, the Service Provider shall scan the medical record documents at a higher resolution or in Grayscale. No extra payment shall be made for the same.
- 10.All the pages in a document including blank pages (only when such blank pages are numbered in the file/document) shall be scanned to produce exact replica of the original document. No page shall be scanned more than once.

11. The Service Provider will deploy its own human resources for all the abovementioned activities. The Service Provider will deploy adequately skilled manpower resources to complete the job within the specified time and of specified quality.

(C) Post Scanning:

- 1. After scanning, the physical document would be pinned together/ tagged in the same form as it was given for scanning by HAHC. At the end of the process all paper medical record documents will be returned in their original form to the HAHC.
- 2. Each page shall be serially arranged and shall be counted while giving the medical record documents back to the HAHC.
- 3. Version Control mechanism should be allowed. Version control must be done in case of addendum to the pre-existing digitized file. Service Provider will have to make this facility available in the capture and indexing module.
- 4. The Service Provider is required to use their own MIS tool to generate fortnightly reports for tracking the digitization status. These reports would contain basically summary of records scanned and stored. The release of payments is linked to fortnightly submission of these reports.
- (e) Storage and Backup:
- 1. A folder structure/configuration management policy must be followed while storing the digitized data in the DVD/ hard disk and or central storage.
- 2. Nomenclature of the digitized file should be in accordance with the e-Gov standard and should be discussed with the End User HAHC.
- 3. Service Provider shall upload scanned and digitized medical record documents into the existing document management system (DMS) of the Buyer as per his requirement.
- 4. Copies of the scanned data (and metadata) shall be provided in DVD /hard disk. Service Provider will create a Master copy for the End User Department and will provide the replica of Master copy as per the requirement of the End User HAHC.
- 5. Service Provider shall use standard methodology for Scanning & digitization and archiving so that in future, any Service Provider can access the archival database.
- 6. Service Provider shall train the respective users on retrieving the records after file conversion.
- 7. Service Provider shall hand over DVD/ hard disk to HAHC of (a) Raw Master Image;
- (b) Clean Master Image; (c) PDF/A Image or any other format as decided by HAHC.

Image Nomenclature

Nomenclature would be Patient ID.

Image Delivery

Direct to client server and Upload through software/bulk upload facility be provided.

Returning the Batches

The medical record documents once scanned shall be stacked in the same File Cover and Tagged with cotton tag. It shall be handed over to the Client personnel for final placement of medical record documents in proper storage areas.

Project Sign Off

Once the deliverables are made, the project shall be called off with a final sign off phase and due payments released. If there is any rectification required, should be notified before the project sign off.