



**STANDARD OPERATING
PROCEDURE
ON
DIGITIZATION OF RECORDS
FOR PAPERLESS COURT
IN
THE HIGH COURT OF
UTTARAKHAND**

INDEX

PARTICULAR	Pg. No.
PART-I IDENTIFICATION OF CASE RECORD	1
PART-II TRACKING OF CASE RECORD	2
PART-III FRAGILE RECORD	2
PART-IV STEPS FOR PRE-SCANNING	3
PART-V SCANNING OF THE CASE RECORD	3
PART-VI BUNDLE ENTRY	4
PART-VII QUALITY CHECK	4
PART-VIII INDEXING	6
PART-IX METADATA ENTRY	7
PART-X PDF GENERATION	9
PART-XI FINAL QUALITY CHECK AND CERTIFICATION	10
PART-XII DMS	11
PART-XIII E-COURT	12
PART-XIV RECORDS RETURNED TO CONCERNED SECTION	12
PART-XV MISCELLANEOUS	13

PART-I

IDENTIFICATION OF CASE RECORD

**1. Priority is to be given to following
Case Types for Digitization:**

1.1	Writ Petition Misc. Single under Article 226 of the Constitution of India
1.2	Civil Contempt Petition
1.3	Transfer Application under Section 24 of the Code of Civil Procedure, 1908
1.4	Transfer Application under Section 407 Code of Criminal Procedure, 1973
1.5	Bail Applications
1.6	Anticipatory Bail Applications
1.7	Criminal Revisions

**2. Segregation and Preparation of Case
Files for Digitization:**

2.1 Pending case files shall be segregated and sent to Digitization Center 10 days prior to expected date of listing.

2.2 Tentative Cause List in soft copy of cases already fixed is to be provided by the concerned Section to the Digitization Centre on daily basis.

3 Handling Additional Documents:

Any incremental documents filed in hard copy by any party/Advocate after scanning of the parental records shall be provided to Scanning Center at least two days before listing of the particular case.

4 Handling Fresh Cases:

- 4.1 Fresh cases filed in hard copy shall be provided to Scanning Center at least one day before the expected date of listing on ***first come first Serve*** basis.
- 4.2 Likewise, physical file of any other case, consequent to the directions of the Court for urgent listing shall be provided to the Scanning Centre ahead of the expected date of listing.
- 4.3 If in a main case, an interlocutory application or any other document is filed through e-Filing or through any other similarly recognized filing method shall be informed by the concerned section to the Digitization Centre for ingestion.
- 4.4 Section In-charge of concerned section is required to examine/check that no such case shall be left out without temporary pagination.

PART-II

TRACKING OF CASE RECORD

5. Inventory Management:

- 5.1 Tracking register shall be maintained in the Integrated Digitization Workflow for all records sent to scanning center.

- 5.2 This register may contain the following details-

Description/title of document collected
File number, if any
Date of collection
Total number of pages
Collected from (court officials)
Collected by (Vendor representative)
Date of return
Return to (Name of Court officials)
Return by (Name of Vendor representative)

6. Verification:

- 6.1 Supervising Officer not below the rank of Assistant Registrar nominated by Registrar (Judicial) shall verify the tracking register on daily basis.
- 6.2 If any discrepancy is found between the entries made in Tracking Register and the Physical Records received for scanning, then such discrepancy shall be resolved before commencement of scanning of the said batch of records.

PART-III

FRAGILE RECORD

7. Identification and Handling:

- 7.1 In case, a record is identified as a fragile record, then its details shall be forwarded to the Registrar (Judicial) in order to decide best course of action in

dealing with the preparation of said record for paperless Court.

- 7.2 Fragile records are those where pages found are so tattered and weak as to be likely to disintegrate upon attempts of being dealt with in any manner. Such records are separated from the lot and shall be sent to the earmarked Fragile Record Storage and preserved with due care as per Rules.

PART-IV

STEPS FOR PRE-SCANNING

8. Batching:

8.1 Records are divided into batches for efficient processing.

8.2 A unique batch number may be assigned to each batch. Division of records into batches may be necessary where the records are received in large bundles.

9. QR Code Application:

- Each case record is required to be applied with a QR Code sticker so that the data may be captured from the record for identification.
- QR Code must be embedded in essential metadata captured from CIS.

10. Assessing the condition of the case records:

- The condition and quality of the record have to be examined whether it will be conducive for regular scanning or book lamp scanning and adopt the best way for scanning the said record accordingly.
- The case records shall be made free of pins, threads; and damaged pages, if any, shall be repaired.

PART-V

SCANNING OF THE CASE RECORD

11. Scanning Procedure:

- All records having barcodes or QR Codes may either be scanned through as ADF scanner or as Overhead scanner according to their respective condition. After scanning, the records may be stored (tagged with threads to avoid missing of any paper) in a rack for future reference, especially at the time of verification.
- These scanners shall have an identification number with date of commissioning or calibration.

PART-VI

BUNDLE ENTRY

12. **Bundle Management:**

After scanning, each batch shall move for bundle entry. For making the QR Codes readable, the required data has to be fed into the system in the form of bundle entry.

13. **Scan Tally:**

In the Scan Tally process, the software reads, identifies and tallies each scanned image with the raw data which was fed into the system during the bundle entry. With the end of the scan trigger, the raw data and the scanned images are stored in the image server. The tally of raw data is necessary for the next process i.e. Quality Check.

PART-VII

QUALITY CHECK

14. **Quality Assurance:**

14.1 Quality verification will be done and any mistake that might have occurred during scanning will be rectified and complied.

14.2 If pages are found to missing, then the Quality Check team shall reject that record from going to the next

process and shall send back the rejected record for rescanning.

14.3 The process should be capable of cleaning, spot reduction, rasterization, deskew, optimization, flattening, compression, linearization etc., to the extent that the output PDF is a "faithful reproduction" of physical case file and is a good candidate for "OCR – PDF Compliance" process.

17.1 The following types of PDFs should ideally be in color:

Exhibits with Visual Elements:

Documents that include photographs, charts, maps, or diagrams where color is critical for accurate interpretation.

Handwritten Documents:

Documents with annotations, highlights, or markings in different colors, as these can convey important information.

Documents with Seals and Stamps:

Documents featuring colored seals, stamps, or any official marks that validate their authenticity.

Evidentiary Documents: Forensic evidence, medical records, or any

visual evidence that benefits from color to maintain its integrity and usefulness in legal proceedings.

14.4 High quality scans should be free from:

- a. Text that is cut off
- b. Crooked pages
- c. Dark gutters (the margins where shadows occur from curvature in the book's spine)
- d. Poor contrast
- e. Pages that are rotated 90 or 180 degrees
- f. Stains
- g. Blurring
- h. For text printed on colored paper, increase the brightness and contrast by about 10%. In case, scanner has the colour-filtering capability, it may be considered using a filter or lamp that drops out the background colour or if the text isn't crisp or drops out, try adjusting scanner contrast and brightness to clarify the scan.
- i. Scan resolution may be 100% scan ratio (1:1) and true optical resolution in DPI calculation in order to evaluate the digital output quality to verify that the digitized version accurately represents the

content of the original document.

- j. If scanning at the minimum standards do not accurately represent the record and the record is not completely legible, Scanning Agency must use a higher DPI, a higher bit number, grayscale or colour scanning, adjust other scanner settings and thresholds or take any other action as required to ensure accuracy and legibility of the scanned record.
- k. At the end, DPI used depends upon readability and viewing details (specifically for photos, graphs, diagrams, illustrations, maps etc.) on upto 28 inch full-HD monitor without any pixilation, blurring etc.
- l. The PDF/A files as scanned & digitized by the Agency will be digitally signed using open source Digital Signature software.
- m. The compressed PDF files created for viewing should also be 50-80% compressed as compared to standard CCITT G4/JPEG compression (in TIFF/JPEG/PDF file format) for Mono/Colour/Grey scale images retaining.
- n. It should be linearized, optimized, flattened PDF (as per applicable

ISO standards for the PDF format and version). In this case the PDF should also be re-flowable such that the text in some documents may be in the forms of big Maps/Plans etc. Arrangement of scanning for the same should also be made.

PART-VIII

INDEXING

15. Document Classification:

- 15.1 Images scanned for case file should be classified as per Rules of Court, 1952 based multi-level Table of Content (ToC). Example: Orders with dates, Order sheet, judgment Petition followed by prayer, various annexure, counter appeal, Miscellaneous, etc. The software shall be capable of entering supporting information like Date, description, child document type, etc. based on identified index type. This is done for the easy navigation of the case file by the DMS user. Using the metadata, DMS users should be able to search case file, and with Table of content, they can reach to a specific record in the case file.
- 15.2 There should be a dynamic table of content approach compatible with

future E-filing and to help move away from inconsistent physical pagination. The Inconsistencies followed in physical LCR management be removed using rule-based Table of Content (e-Natthi) developed in DMS. As a part of it, digital Natthi will have a rule-based listing of records resulting in efficient proceedings in court.

- 15.3 The Dynamic e-Natthi generation makes solutions easily replicable to District courts to manage both disposed and live cases. And replicate the practice of distributing E-Natthi/ToC to lawyers and applicable stakeholders as per rules to develop common reference points between lawyers and honorable judges for referring target documents in the case file to run smooth paperless court proceedings at High Court and District Courts. The ToC published along with Cause List on the website must be easily accessed by Lawyers and litigants.

16. Indexing:

- 16.1 In the process of indexing, the aforementioned portions of case records are marked & segregated in

the digitization workflow software so that the user may access any of such parts of the record directly by click of a button, instead of scrolling down to that part of the record.

16.2 However, the User must have an option to search the record by page number and other free text search.

16.3 The indexing parameters must conform to the physical file parameters in accordance with Rules of Court, 1952.

17. Sub Document Generation:

17.1 Scanned images should be classified as per the rule-based Table of Content. Example: order sheet page, annexure page, judgment page, etc. The LCR shall be indexed as LCR Annexure and broad classification entries shall be made accordingly.

17.2 However, when the LCR is already available in the application of the lower court, it should be possible to pull LCR with classified table of content from lower court's application into the High Court application seamlessly. Hence, both

DMS of High Court and Lower Court should be identical for seamless integration and data interoperability.

PART-IX

METADATA ENTRY

18. Meta data:

18.1 The metadata elements are clustered into 14 information blocks as listed below-

S.	Preservation Metadata Information Blocks	Remarks
1	e-filing Information	
2	Caveat Information	
3	Case Information 3.1 Litigant Information 3.2 Advocate Information 3.3 Subject Information 3.4 Document Information	3.1 and 3.2 are repeatable blocks
4	FIR Information	
5	Act Information	repeatable
6	Judge Information	repeatable
7	Case Status Information	
8	Order Information	repeatable
9	Digitization Information	
10	Record Room Information	
11	Old Case Information	
12	Digital Signature Information	repeatable
13	Integrity Information	repeatable
14	Access Control Information	

18.2 The following metadata shall be

entered (if not captured through CIS) in every scanned case record, whether Civil or Criminal:

a)	Case Number
b)	Case Year
c)	Case Type
d)	Barcode or QR Code Number
e)	Court Name
f)	Name of Petitioner(s)/Plaintiff(s) Prosecution etc.
g)	Name of Advocate of Petitioner(s)/ Plaintiff(s)/ Prosecution etc.
h)	Name of Respondent(s)/ Defendant(s)/ Accused Person (s) etc.
i)	Name of Advocate of Respondent(s)/Defendant(s)/Accused Person(s) etc.
j)	Name of the Judge/ Presiding Officer with Designation
k)	Date of Scanning
l)	District Name
m)	Date of Verification
n)	Name of Verifier

19. Additional Meta Data:

The existence of any of the following documents shall be entered as Additional Meta Data so that the digitized records containing the said documents can be easily identified for taking steps to return the said documents in the physical form to the concerned parties/advocates, etc.:-

a. a negotiable instrument (other than

a cheque) as defined in Section 13 of the Negotiable Instruments Act, 1881 (26 of 1881).

b. a power-of-attorney as defined in Section 1A of the Powers-of-Attorney Act 1882 (2 of 1882).

c. a trust as defined in Section 3 of the Indian Trust Act, 1882 (7 of 1882).

d. a will as defined in clause (h) of Section 2 of the Indian Succession Act, 1925 (39 of 1925), including any other testamentary disposition by whatever name called.

e. any contract for the sale or conveyance of immovable property or any interest in such property.

f. An original Sale Deed, Educational Certificate.

g. Any other original document.

20. Verification:

20.1 Verification of Metadata & Documents indexing shall be done to check whether any valuable data is missed out during the process of documents classification and metadata entry. It acts as a quality check so that nothing is missed out while feeding the data in the system.

20.2 The Agency has the control over the final verified data, and if they identify

any mistake, they shall rectify it in the Verification process so that it can go for Departmental verification.

20.3 The data shall be editable if any mistakes are identified during the digitization process. However, once the scanned record is uploaded in the DMSthenauthorized users can make changes in the metadata & data classification and such change should be made with due permission of the competent authority.

21. Data Interoperability:

It is extremely important to standardize the common data structure and schema across the process for seamlessly migrate case records between Taluka, District courts and High Court. Hence, all should be on identical DMS platform with standardized schema, table of content. Also, it should be exportable as per Data preservation SOP 1.2 created by Honorable Supreme Court of India.

PART-X

PDF GENERATION

22. PDF Conversion:

The PDF which meets the requirements, processes, quality standards, terms and conditions as specified shall be treated as "100% Compliant PDF".

23. PDF Compliance:

23.1 The Scanning Agency should convert the output PDF to strictly match below criteria before submitting/uploading the same on the server for Ingestion:

- a. DPI (For normal pages): maximum 300
- b. DPI (For torn/damaged physical papers/pages): maximum 600
- c. DPI (For colored photographs /maps /graphs /diagrams /figures /illustrations etc.): maximum 1200.
- d. Colour tone (For normal pages): Grayscale
- e. Colour tone (For colored photographs /maps /graphs /diagrams /figures /illustrations etc.): Colour
- f. Standard font sizes, 10-point and up, are fine at 300 dpi. However, smaller fonts might be harder to read at this resolution, so scanning agency may decide to bump it up to 400 dpi.
- g. Colour photographs are often scanned at higher resolutions to capture their detail – typically from 600 to 1,200 dpi, with the higher

resolution used for the best archival images.

23.2 The physical files when scanned & processed (after PDF Compliance or before Ingestion) should be produced in an output PDF in "PDF/A-2a" format with "PDF 1.7" version (or preferably PDF/A-4 aka PDF/A-NEXT format with "PDF 2.0" version).

24. Optical Character Recognition:

24.1 OCR functionality should automatically convert one or many non-OCR PDF files into OCR PDFs on a single click/command, without any other manual intervention. Record about OCR of digitized files should be updated in the production capture workflow to avoid re-work or duplication.

24.2 The OCR text should be in ASCII encoding and should generate sandwich PDFs to avoid showing garbage characters at the front while retaining the original scanned content for viewing and printing.

24.3 It is quite likely that some records may contain text in English as well as in Hindi languages. In such case,

appropriate bilingual OCR should be used. The OCR may be selected on the basis of accuracy of the text output.

PART-XI

FINAL QUALITY CHECK AND CERTIFICATION

25. Verification:

The nominated staff of the Court shall verify whether the scanned records is tallying with the physical record or not and also check the correctness of the metadata in accordance with the corresponding information available in the physical record. Any mistake is found by the Court, than the record is sent back to the respective stage where the mistake may be rectified.

26. Certification:

26.1 The designated /supervising officer(s) of the court should verify each digitized record by comparing it against the original document as per following parameters (as applicable) and store the following information in a database.

26.2 The following information forms the basis for issuing the certificate by the designated officer for certifying the admissibility of digitized record in the court as per the Section 65B of Indian

Evidence Act. The rank and designation of the officers in charge of the particular digitization processes may be identified vide separate Order-

Record number
Document orientation (Portrait or landscape)
Number of pages
Original or Photocopy
Comparison of source and digitized record
Legibility of text in scanned document
Quality of images
Date and time of Digitization
Master File name, Size and Format
Special Considerations
Edits Performed
Integrity of Final Digitized record
The name of the agent associated with the digitization process (e.g. name of the outsourced bureau or name of the in-house operator)
Capture Device Name (Hardware/Software)
Date of Last Calibration of Device
Verified by

27. Reviewing Quality Control Checking:

- 27.1 The results of quality control processes and quality checks should be documented.
- 27.2 A review of quality procedures for digitizing should be undertaken regularly to ensure that the procedures

continue to meet the business purpose.

- 27.3 Appropriate training should be provided to all staff that create, manage or work with digitized records.
- 27.4 Documentation on entry level and the frequency of training provided to those staff involved with digitization should be created and maintained.

PART-XII

DOCUMENT MANAGEMENT SYSTEM

28. File Naming as per CNR Guidelines:

- 28.1 The file naming of digitized files must comply with Case Number Record (CNR) Numbering System.
- 28.2 Incremental serial numbers may be added in the CNR string of characters to define page numbers.

29. Synchronizing the digitization:

In view of the centralized Repository for digitization, the digitized data should be synchronized with standardized parameters of digitization.

30. DMS Solution:

- 30.1 DMS must fulfill the requirements of ISO 14721:2012 OAIS Reference

Model.

PART-XIII

E-COURT

30.2 The DMS must be capable primarily to have mechanism of storage of audio and video record in the respective case records.

31. Uploading:

31.1 Once the client verification is done, all records which are error free shall be uploaded in the DMS Server. The database server can be accessed by using a secure login ID and password.

31.2 The Court shall use the DMS with a secure user ID.

32. Storage:

32.1 The digitized master data / source data may be stored on Network Attached Storage (NAS) at the time of digitization.

32.2 The database containing the digitized records of the Court shall only be accessible in the Local Area Network (LAN) of the Court.

32.3 The master data and access quality data shall be enabled for transferrable storage media after it is finalized, and verified.

33. E-Court Interact:

33.1 The E-court solution shall be enabled to replicate the experience of physical court by providing Court User the view of cases listed as per Cause List and providing experience in navigating the case files for Case hearings seamlessly.

33.2 This digital mechanism will mirror the usual comfort in process/practice undertaken by Court Users to view, read, dynamically navigate, and compare files.

33.3 Software shall have features to assist in conducting live Court hearings with ease on an SPD including annotations, handwritten notes, which are otherwise not available while using physical case files.

33.4 The DMS software should be integrated with CIS for Causelist viewing, automatic case record copy in a routine base.

PART-XIV

RECORDS RETURNED TO CONCERNED SECTION

34. Record Retrieval:

34.1 Each record shall have a sheet attached on it that reveals the date when the record was scanned, the date when it was verified, the name and signature of the person who verified the record.

34.2 A stamp saying "Digitized & Verified" shall be affixed on each record successfully scanned, digitized and verified before being returned to concerned Section.

PART-XV**MISCELLANEOUS****35. Digitization Progress Monitoring:**

35.1 Proper logs with date, timestamp and accession register of digitized records should be maintained to report and monitor the progress of digitization happening.

35.2 Release of payments to vendors involved in digitization should be linked with online reporting on the progress of digitization.