

# NATIONAL JUDICIAL ACADEMY



**P-1268**

**NATIONAL WORKSHOP FOR SENIOR HIGH COURT JUSTICES  
ON INFORMATION AND COMMUNICATION TECHNOLOGY IN  
COURTS**

**13<sup>th</sup> & 14<sup>th</sup> November, 2021**

## **Programme Report**

PROGRAMME CO-ORDINATORS

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The National Judicial Academy organized a two day National Workshop (Online Mode) for Senior High Court Justices on Information and Communication Technology in Courts on 13<sup>th</sup> and 14<sup>th</sup> November, 2021. The workshop emphasized upon the use of information and communication technology (ICT) as one of the key element that significantly improves the administration of justice. The rapid development of technology has opened floodgates for new opportunities that were unthinkable a few years ago. Additionally, the discussions also highlighted that ICT can be used to enhance efficiency, access, timeliness, transparency and accountability, and can help judiciary to enhance access to justice. The deliberations also included discussion on evaluation and background of ICT in the Indian judiciary and across the globe. The workshop explored the use of ICT within courts to support administrative wing, and also included discussion on the use of technology to exchange information between courts, parties and the general public. Another core area of discussion was the use of technology in aiding judges on the judicial side. Lastly, the workshop brainstormed on the future of courtroom technology and use of AI in judiciary.

## **DAY-1**

### **Session 1**

#### **ICT in Courts: Overview and Contemporary Experiences**

- Use of Courtroom Technology an Evolving Concept
- National & International Experiences

**Speakers:** Justice A. Muhamed Mustaque , Dr. Abeline Dorothea Reiling & Mr. Robb Wilmot

**Chair:** Justice Madan B. Lokur

The importance of use of ICT in the judiciary at various levels and use of available ICT tools to improve court functioning was emphasized. Experiences of functioning of virtual courts in the times of pandemic and importance of continuing with hybrid model of court functioning even after the

pandemic was discussed. An overview of the US federal court system was given to enable participants better understand the use of technology by US Federal courts. A video about priorities of judicial education in terms of technology and the issues and challenges of encryption in terms of use of technology in courts was shared. Legal aspects like right to free speech, 5<sup>th</sup> Amendment rights, right to privacy in encryption technology and access of government to encrypted information and its challenges & benefits was discussed. The discussion about security of recorded data, and safety of courts from cyber-attacks was focused upon. The importance of use of secured technology and hardware (institutionally issued & controlled) e.g. laptops, mobiles and email ids etc. was emphasised. The judges were cautioned from using open source technologies like Gmail and other services for judicial or court related work. It was stated that case management, desktop software, revenue collection systems & unification were the historic technology concerns for US federal courts which they have overcome with the experience. The impact of technology drivers (*viz.* natural disasters, man-made disasters e.g. economic issues, civil unrest, immigration, pandemic etc.) which significantly contributed to the development of technology, in all government sectors with courts as no exception was highlighted. The pre-pandemic projects of the US federal judiciary *viz.* automation, national phone system, cloud technology use, remote access, virtual desktop infrastructure, electronic filing, and jury management etc. were highlighted. But pandemic changed the priorities and they started working on remote court proceedings like digital signatures, virtual court and jury trials, virtual evidence recordings, virtual sentencing and virtual settlement hearings. Challenges in use of technology like use of platform, technology bias, issues relating to integrity of technology enabled court etc. were discussed. The participants were cautioned about safe use of technology. A brief overview of courts and their hierarchies in Europe was given and the use of information and communication technology in European courts was highlighted. An example of

EU justice portal ECLI search, where one case search all case-laws across the borders of nations in Europe was cited. Elaborating on the systemic adoption and use of technology in the EU Courts it was explained that the same could be generally divided into three parts – (1) back office technologies which are used by court staff other than judges - *viz.* case registration database, document production and retrieval, and research etc., (2) Courtroom technologies generally used by judges – *viz.* digital case file, hearing and court proceedings recording, video-conferencing etc. and lastly, (3) E-filing technology – these are for the general public or consumers of the court system to use *viz.* e-case filing, user interface between lawyers, courts and parties as well as general public. The data from Europe was shared wherein it was highlighted that all European judiciaries are reasonably equipped with back-office and courtroom technologies like email summon service, central jurisprudential and legislative database, model templates, automation tools, dictation software & video conferencing, intranet, central online criminals registers etc. It was delimited that there are some European judiciaries which have started experimenting e-filing and online case-tracking for general public at large making the access to justice more efficient and trustworthy. It was projected that 98% European judiciaries have digital case registration, while 67 % have digital financial management and 43 % have digital case-load measuring. The communication tools for courts as static websites, downloading forms, submission of forms online, and complete online transaction etc. was explained. Various challenges and opportunities in ICT in judiciary was discussed. ICT can improve impartiality and integrity of courts, more active interaction with outside judiciaries, improving court processes *viz.* court and case management, and improving access to justice by technology. Governance as a main challenge was highlighted. Other challenges included complexity *viz.* political, technical and court related complexities, legal culture - which looks back and not ahead is another major challenge in use of ICT. An overview of e-courts projects in India

since 2005 under the leadership of e-committee Supreme Court of India was given. Overview of existing structure of ICT in India *viz.* increased use of computers and electronic filing methods to enhance the reach and ambit of courts & streamline the process of getting justice by improving online accessibility to required files, certificates, etc. was celebrated upon. It was stated that at present process re-engineering in ICT modules in Indian Courts. Experiments done in Kerala about dashboard and virtual office of judges where all files, boards, etc. available for judges virtually was underlined.

## **Session 2**

### **Use of ICT in the Judicial Proceedings**

- Legal Research & Data Retrieval
- Video-Conferencing, Live Streaming & Recording
- Appreciation of Evidence & Judgment Writing
- Board Management & Case Grouping

**Speakers:** Justice Sanjeev Sachdeva & Justice A. Muhamed Mustaque

**Chair:** Justice Madan B. Lokur

Chair for the session set the context of the session by briefly explaining the nuances of use of technology in judicial proceedings. A brief illustration on the drawbacks in the integration of technology in Indian courts, and steps to be taken to improve the situation followed. The need to have technology connections between investigation agencies, courts and jails was emphasised. Use of Virtual Reality technology to recreate the crime scene, evidentiary purposes in the court proceedings was insisted. Advantages of the stenography technology, enabling court staff in real time was illustrated. Examples about voice to text technology being used by stenographer in courts was shared. The potential transformation these technologies can bring to the court functioning was underscored. A glimpse of indigenously developed speech to text technology that is being used in

Tamil Nadu and Kerala was presented. Use of AI in data analysis in court, tools that maybe used to make easy legal research, data retrieval, scheduling of large number of cases, etc. was discussed. A glimpse of indigenously developed video conferencing technology called “Vconsol” that is being used in High Court of Kerala for virtual hearings with dedicated stakeholderwise login was demonstrated/shared. All the court related data like daily boards, case files etc. are available in the platform. A short video of “Vconsol” was shown to make participants understand the nuances and benefits of technology. The use of document visualizers in courts for virtual hearings was explained. The speaker talked about the Internet of Things (IoT) and Court Management Systems. It was suggested that, making systems integrated to work together will give the court savings in time, manpower, and energy. It was opined that using internet connected technologies in conjunction with Machine/Deep Learning systems will open up new ways to effectively manage the courtrooms with both comfort and security in mind. Examples of use of technology like desktops, portfolio of e-court, e-cause list etc. prevalent in Delhi High Court were deliberated upon. Parcha entry system created in Delhi High Court was explained to the participants. How electronic evidence can be used in judicial proceedings and the challenges in admissibility & appreciation of electronic evidence was explained. Importance of ‘metadata’ in relation to electronic evidence in courts and its significance to test the veracity of electronic record was emphasised upon.

## DAY- 2

### **Session 3**

#### **ICT and Administration of Courts**

- Paperless Courts & e-Filing: Effective use of e-Sewa Kendras, Electronic Process Serving & Electronic Payments etc.
- Electronic Court & Case Management: Use of Tools for Verbatim Recording & Retrieval, OCR, Maintenance & Management of Records and Files in Digital Form
- Technologies for Exchanges between Courts and Various Stakeholders: SUPACE, SUVAS, E-Court Services, NJDG Etc.

**Speakers:** Justice R. C. Chavan & Mr. Ashish J. Shiradhonkar

The session commenced by emphasizing on goals achievable in contemporary time for better administration of courts by using information and communication technology. The significance of e-filing was emphasized and it was highlighted that since digitization of files in the High Courts consumes a lot of effort therefore, e-filing should be adopted in all courts especially of current cases so that more and more paperless courts come into existence. It was advised that e-filing should be initiated for cases involving government departments. The reason being that the major bulk of litigations in High Courts is writ petitions and one party among such cases is often the State. Therefore, at least half of the paperwork can be done away with. The other half could be digitized by the court staff if not done by the advocates. It was suggested that the focus on digitization of old records should rather be shifted on the digitalization of new/current records. Further, the discussion highlighted that in criminal matters most of the documents with the police are in digitized format and therefore, there is no need to file any paper document in the magistrate's court in a criminal case. The initiative of having the first paperless magistrate court in Kerala was

appreciated. The participants were informed that such initiatives will definitely help courts to become paperless. Subsequently, various facets of e-Filing 3.0 which was launched in October, 2020 were discussed. It was highlighted that the State of Maharashtra is currently using this e-Filing 3.0 and all other States have been given the same for testing. While giving the glimpses of what e-Filing 3.0 provides, it was underlined that the e-Filing system is a complete end to end solution developed for online filing of cases. Both Civil and Criminal cases can be filed before any High Court and District Court of the country, wherever the e-Filing system is adopted as on date. Features of this system include - online submission of vakalatnama, readymade templates, e-signing facility, online video recording of oath, online payments, filing of multiple IAs/Application, portfolio management, and bilingual mode.

Subsequently, some of the unique features and benefits of e-Filing 3.0 were elaborated:

- ✓ Entire filing can be done in asynchronous mode without advocates and clients meeting each other physically.
- ✓ Submission of pleadings in the courts, video recording of oath, when client, advocate and court are geographically situated at different locations is possible.
- ✓ Saves time, paper, money and travel of advocates and clients.
- ✓ Reduces footfall in the court.
- ✓ Minimizes meetings between clients and advocates.
- ✓ E-Filing knowledge bank provides training material on the portal that includes- short training videos for each & every functionality; online help for quick resolution while working on specific functionality; frequently asked questions with elaborate answers; manual to understand complete functionality.

The session further highlighted that judgments and final orders of High Courts are also available on the [judgments.ecourts](http://judgments.ecourts) portal. Various parameters like name of judge, case number, acts, section,



name of parties, decision date and disposal nature are provided for searching the judgments. The most important feature of this portal is free text search engine, which finds out judgments based on given keyword or combination of keywords. Combination of several search options will assist the users to get the desired results. The embedded filtering feature allows further filtering on available results, thus adding value to the search. The participants were requested to give their valuable suggestion in enriching the portal to its maximum.

#### **Session 4**

##### **Future of Courtroom Technology**

- High Technology Courtrooms
- Use of Artificial Intelligence in Advocacy and Judging Etc.

**Speakers:** Dr. Abeline Dorothea Reiling & Mr. Robb Wilmot

**Chair:** Justice Dama Seshadri Naidu

The session initiated by highlighting that court systems across the globe are very subtle towards technological advancements which are not readily embraced by judiciaries in the first instance. While dwelling into the connotation of artificial intelligence [*hereinafter AI*] it was stressed that AI is fundamentally a science. It is a spectrum that beholds transition, automation and machine learning. To demonstrate how the technology driven courtrooms function, the virtual center of the Federal Judicial Center was presented to the participants *via* virtual navigator. Thereafter, ingredients of AI that include data, algorithms and massive computing power were briefly discussed. The discourse further highlighted that AI is of two types. One, *Narrow AI* that is essentially general intelligence which is incapable of adapting to new situations on its own. It lacks situational awareness. Two, *Strong AI* is the ability of computational machines to perform singular tasks at optimal levels which is usually better than humans. Companies that are investing in AI by industry were also discussed. The eight takeaways for judges as identified by Judge James

E. Baker were elaborated upon. These takeaways are- numerous AI methodologies, iterative process of AI, humans programme the machines, AI predicts and not conclude, AI accuracy depends on quality and volume of data, algorithm is the heart of AI, most AI is not yet good at situational awareness and AI is better at identifying, aggregating and deriving meaning from data than humans.

The session further discussed AI issues that may be relevant for courts like- whether predictive algorithms are fine for court processes, whether AI predictive policing feeds into or follows a 'broken window theory' of policing by predicting more crime in an area that already has crime, whether statistical, moral, interpretational, accidental and intentional biases can influence AI results and lastly, that court processes are premised on individualized levels of suspicion and not data patters as used in AI. Subsequently, CEPEJ (European Commission for the Efficiency of Justice) Ethical Charter for AI in judicial systems was explored, that focuses on- respect for fundamental rights, non-discrimination, quality and security, transparency, impartiality and fairness and AI under human control. The National Automated Facial Recognition System which is approved by the Indian Government in 2020, led by National Crime Records Bureau (NCRB) was discussed. It was highlighted that the Facial Recognition Tracking (FRT) systems are already being used for law enforcement. FRT is aimed to extract facial biometrics from videos and CCTV footages matching them with the existing database. The participants were encouraged to contemplate how this system can be resourcefully used by the judiciary.