



**RAPPORTEUR FOR**  
**WORKSHOP ON INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)**  
**TOOLS & USAGES**

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SUBMITTED TO:

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4TH YEAR - B.A., LL.B

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**INTRODUCTION:**

National Judicial Academy organized a workshop on the Workshop on Information and Communication Technology (ICT) Tools and Usages from 19 to 21 February, 2016. Representatives from the District Courts across the country participated in the workshop. The three-day workshop was split into four sessions for each day.

Mr. Parmod Goyal, Mr. Kuldeep Singh Kushwaha, Justice S.G. Shah, Justice Sanjeev Sachdeva, Justice S. Talapatra and Mr. Talwant Singh participated as Resource Persons for the programme and guided the sessions.

Ms. Navpreet Pajrath, Mr. Sebastian represented Google India for the last session of day one of the programme and discussed on the topic Functioning of Internet and related concepts.

**PROGRAMME COORDINATOR:**

- ❖ Yogesh Partap Singh (Research fellow)

**DAY1**

The first day was divided into 4 sessions.

**SESSION 1**

**USE OF VIDEO CONFERENCING TECHNOLOGY IN JUDICIAL  
ADMINISTRATION**

**HON'BLE MR. PARMOD GOYAL**

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The session was inaugurated by Dr. Geeta Oberoi, who also posed a question to the audience whether use of Video Conference in the courts can be beneficial? The audience enthusiastically participated in the discussion as reflected in their reactions, majority of them opinioned in favor of video conferencing and were of the view that it is good but expressed their apprehensions regarding the right of privacy of the accused and also continuous availability of lawyer to the accused as the lawyers won't want to go to the jail and waste their whole day on one case, and also the accused may not be able to talk to his lawyer during the proceedings in private in absence of provision for it. Thereafter, Mr. Parmod Goyal joined the session and suggested some of the ways through which the video conference for the cases can be implemented.

He suggested that to do so there has to be a change of mindset, video conferencing is possible but maybe in future as the face to face, one on one communication is good and convincing and in absence of physical interaction the closet way is to have the video conference. The question of how to use it was raised. It was suggested that for the remand matters, examination of judicial officers, framing of charges, taking expert advice from the doctors, and even the entire trail can be conducted through video conference. It is requirement of the court that the accused should be present for the signature, it is the proof that the charges were framed in his presence, so to overcome this problem it was suggested that it can be done through the judicial officer, the lawyers and the people present during the video conference, the relevant documents can be signed by them with the comment that the charges were framed in the presence of his lawyer and with his knowledge and was read over to him as well.

The other uses of the video conference was also discussed, it can be used for interviews of judicial officers for promotion, training can be through video conference, project monitoring and its progress at the District Courts levels and interaction with the SPs through video conference, meetings with the jail inmates with their family members can also be resorted through it, and also can be used for administrative meetings, etc.

The question of legal sanctity of video conference was also discussed; the house was generally of the opinion that it has legal sanction. It was discussed through case laws such as *state of Maharashtra Vs. Dr. Praful V. Desai* where Supreme Court commented that video conferencing is not a virtual world but a real world. In case *Pasavaraj R. Pati; vs. State of Karnataka 2000SC* it was put up by the accused that it is hard to interact with the lawyers so it should be rejected but the Supreme Court upheld its validity.

The modes of recording the proceedings through video conference and its validity were also discussed. It can be done as hitherto by administering oath, identification of witnesses; however, witnesses can sign their deposition in presence of the attorney through digital signature. The lawyers/representatives of the parties present in the court should verify that it was done in a video conference.

It was discussed that the accused do have a right to give instruction to his lawyer regarding the matter, though it happen hardly in 2 to 3% of the cases but still cannot be ignored. It was suggested that the accused can meet with the lawyer before the commencement of the trial.

A question was raised whether the accused can refuse for the remand matter through video conference, it was concluded that yes they can say no for it, but the Supreme Court has commented that if there is a video conference then it should be done through it. Another question came up whether video conference can also be used for mediation and legal aid purposes, it was concluded that yes it can be used.

The advantages of using video conference were also discussed. It emerged that it is cost effective, save time and employment of manpower, builds relation, advance face to face communication, avoid travel, reduces footfall in courts there by reducing pressure on infrastructure, etc.

For the implementation of foolproof video conference there has to be proper software prepared as well as hardware. The difference between software video conference and hardware video conference was discussed it was found that the software video conference is less expensive, it can be installed on PC, mobiles, laptops, I-Pads etc., the person to person work load can be reduced by it. Whereas all these are totally opposite for a hardware video conference it is expensive, it requires dedicated equipment and it can be used for mostly boardroom conferences but has a superior quality.

Optional accessories of the video conference are that the proceedings can be recorded; the documents can be shared on it with the help of a scanner, which is one can scan the documents desired to be shown and it will be visible on the screen, etc.

The failures/disadvantages of the video conference were also discussed. It was stated that it does not find cooperation of bar. The judicial officers think that if he has to decide the case then no one can stop him from doing it, so it is not much a problem, the lawyers can take any kind of shape as per their interest. Besides training of staff is required, connectivity quality of the internet server is also a problem as if the connectivity is not good then there cannot be a good communication during video conference as the signals are broken most of the time.

The problem of availing a leave was also discussed. If the judge has to take a leave and it is not informed then there can be a problem as the video conference case is already fixed. It was viewed that there are many new methods to manage these kinds of problems that will be discussed during other sessions.

Lastly it was discussed that to make all this success there is a need to appoint coordination committees at the state level as well as at the district level. They will be responsible for coordinating with other participants. The state level committees should be established in accordance with the Code of Civil Procedure. It will have director of health services, DGP of the prison, the judge of District Court and a person representing the state and others as

required. There will be an assistant staff at state level and the same will also be established at district level. The information can be shared on weekly basis and can be communicated with the help of emails, or use of goggle sheets, SMS and mobiles, etc. There have to be a monitoring system as well.

**SESSION 2**

**DIGITIZATION OF RECORDS**

- **COURT RECORDS**
- **REVENUE RECORDS**
- **EVIDENCE RECORDS**

**HON'BLE MR. KULDEEP SINGH KUSHWAHA**

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The session commenced with Mr. Kuldeep Singh Kushwaha telling what a bandwidth is. That the bandwidth for all the net servers are different, that for message text only 256 Kb/s is used and for video conference 5 Kbps is used, so we have to use the net in a proper and planned manner. He shared that the digitization of the District Court can be done but the main challenge is the funds, so the funds should be used in a proper way to gather maximum results instead of its unthoughtful use.

Explaining the term digitization he brought out that it is nothing but to store the records in an electronic form. How can the data be digitized? To explain this an example was given that the picture from our mobiles or any document in hard form can be scanned in the computer and it can be stored in JPG format, this is how basically the digitization can be done. The steps which can be followed for digitizations are selecting, acquiring, digitizing, creation of Meta Data, organization, providing access, etc.

How to do preservation of the digitization? For that make an internal software to monitor how much of the data has been digitized, who has done it and who is accountable for it. First select a company for digitization, then scan the data to be digitized, make sure that old documents are cleaned in a proper manner before it is scanned as it might not be readable if the documents are not cleaned due to the dust. Sometime it happens that the documents which are scanned are not complete so to overcome this problem make sure that the data is tallied with the original documents. When the data is digitized the indexing system has to be created such as the case number is there so that we can find that file through it. Then there is also the question of how to retrieve the data if the data in the current computer has collapsed. To safeguard from this there has to be a contact with the company who should have the retrieving server and the data can be retrieved within 3 seconds.

The indirect benefits of the digitizations were discussed. They are that the original copy can be kept in a secure place, there is no need of large staff, no need of inventory, it is time saving, many copies of the same document can be made easily, etc.

There are some problems with digitization, they are as follows:

- 1- Improper digitization process is a source of natural deterioration.
- 2- Improper use of equipment's and facilities can cause more damage than natural elements.
- 3- Digitization without clear goal is at risk of failure.
- 4- Cost of digitization increases when work efficiency is low.
- 5- Quality is determined by the intentions or goals of digitization.

The cautions which can be taken up to protect and avoid some problems mentioned above are:

- 1- Avoid consulting IT persons or a salesperson that does not have solid background in digitization, some people with technical background should be there in the department.
- 2- When dealing with commercial organization check the qualification of their technical personnel's that is whether they are using open source or propriety source. The open source is dangerous as there are chances that the data stored there can be accessed by unauthorized persons through other computers.
- 3- Digitization should be done by expertise IT professionals.

Some suggestions were made regarding this, that to accommodate all these things some amendments are required. The software also have to be developed in such a manner that it is compatible and doing much better work, NIC can also help in this sphere.



**SESSION 3**

**SECURITY FOR COURTS: RECORDS AND NETWORKS**

**HON'BLE JUSTICE S.G. SHAH**

**HON'BLE MR. KULDEEP SINGH KUSHWAHA**

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The session was inaugurated by Mr.Kuldeep Singh Kushwaha posing some queries to the participants that we have the bandwidth but it is not that secure as it should be considering the need of the judicial department. The department is given net and it should be secure. The data of the servers are mostly coming from Singapore. We have to take preventions and secure our networks, server and the information. It can be done by monitoring of the bandwidth by professionals; connectivity of the data is to an authenticated server.

The question was raised what should be done in case of loss of data? It was suggested that the arrangements should be made for disaster recovery system, the information is available with other data center, but they will be only storing servers. They will not be working parallel with the original sites, the data will only be stored there. There are two types of data first is running code data and other is digitized data. The storage should be like that if there is any loss of data then it can be recovered within 20 minutes but what will happen in those 20 minutes. There is a system known as mirror process, where if one server is down then the other server automatically starts up. The data can be preserved but the preserved data is for a limited time only, there can be two methods through which the data can be preserved. The first is micro films and the second is hard disk. The data retrieving is an important factor it can be done first in the hard drive and then in a microfilm. As the storing time of a hard disk is less as compared to the microfilm, microfilm can store data for 500 years. The software along with the data has to be preserved so that in long runs it can be accessed. The software has to be preserved because in next 20 years the software's may change and the data stored in the old software will not be retrievable with the new software therefore, it is required that the software's be preserved.

There is the problem of hackers and there has to be a way to circumvent it. For that every nodes every modem has to be kept under check. The question of how to secure the data in our computers was raised? It can be done by encrypting the data and to secure the data through the help of digital signatures, otherwise anyone can have access to our data. There is another method it is to have E-Committees, where you can access the data. It can even be accessed on mobiles, one of the way is Cloud. Cloud is a method of storing data in other's provided servers and it is done with the help of internet. Cloud is easy to maintain. The persons who own the servers can either be industry owners or others.

Arrangements have to be made to digitize the data of District Courts. It is almost 15 corers data and it has to be given to the District Court for digitization. There has to be a method of centralized filing counters, the responsibility is with the High Court to maintain account of District Court's in PDF format. But the biggest problem is how to identify the person who is doing mischief with the computers or who is hacking in the server.

An issue was raised that if the data is in some other form then what do we need to do to access it? It was suggested that for that the computer, software, and skills will be needed, other than that electricity, hardware and language is required as well. The software is another thing as the software's keeps changing time to time so even the computers and everything has to be updated time to time to make the accessibility easy. Today our data is available on paper so is easy to access it but if we digitalize it then the power, hardware, software, language and other things will also be required to access it. The technology keeps on changing so we have to change with technology and adapt to it.

**SESSION 4**

**NATIONAL JUDICIAL DATA GRID**

**HON'BLE MR. PARMOD GOYAL**

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The session was commenced by posing a question to the participants, what you understand by National Judicial Data Grid, it is the concept of E-Courts. The website is [ecourts.gov.in](http://ecourts.gov.in), the District Court server can be opened through it. The website has two views:

- 1- Public view
- 2- Administrative view which is password protected

The District Judges have been given a password and ID so they can access the administrative view as well. When you visit the website various information is available there like case pending, case solved, cases which have not been fully updated, cases listed today, etc. there is even a state wise view for the cases, the state wise pending cases, solved cases, old cases, etc. can be seen and accesses. There is also an option of further going in details of a case, click on the list it can be the pending case list, etc. then a list of cases will be seen, from there click on the cases you want to know about, the details of the cases will be shown on the website, this way details of each and every case can be available to you, the next date, the previous date can be seen as well along with the orders passed on that case with the dates on which it was passed on. The site is updated every time any new order is passed. National Judicial Data Grid is complex as it provides the connectivity between all the different courts in India.

To manage all this there is the requirement of the hardware as well as software's. The question whether who should decide on what kind of hardware should be used? Should it be done by NIC or technicians? It was decided that it should be done by legal fraternity that can decide after taking the feedback from all levels about the requirement of their courts. In some courts it happened that the equipment's were provided to them but there was no place for storing them, so all these problems have to be solved by the committees. The software is changing almost continuously, previously it was CIS 1.1 but now CIS 2.0 is also available, there have to be a uniform nomenclature to have a centralized data. And to operate all this trained persons are required.

The advantages of the National Judicial Data Grid were also discussed. It was pointed out that it brings transparency in the system, footfall and footwork is reduced, and corruption is also reduced to a great extent. Judicial officers can also be protected through this, it happens that sometimes it is put on the judicial officers that they have not passed any order on that case but if it is updated on the site at the time the order is passed then the judicial officer has a proof that he has passed an order for it. Court management has been made easy through this, old cases can be seen on the website, there is monitoring at all levels with the help of this website. Data mining can be done with the help of the data which is available to us, impact analysis is also possible through this, business analysis, what is the reason for delay, business intelligence tool can also be applied here, etc.

The problems which are faced due to updating and other things, can be overcome by having monitoring the sites regularly, sensitization of the staff can also help, for data entry there

should be new and trained staff, but we give this work to already existing staff and their work is increased due to this.

It was concluded that with the use of National Judicial Data Grid lots of problems can be solved and if the problems are communicated to the High Court then the problems can be rectified, we can even fine tune and improve the process making it more user friendly. The consequence of using NJDG was that the cause list has stopped being prepared manually. All the parties name are fed in the computer, we have made sure that the summons is going through CIS only, and for last 6 months every reader and person is feeling relieved.

**LAST SESSION**

**FUNCTIONING OF INTERNET AND RELATED CONCEPTS, GOOGLE INDIA**

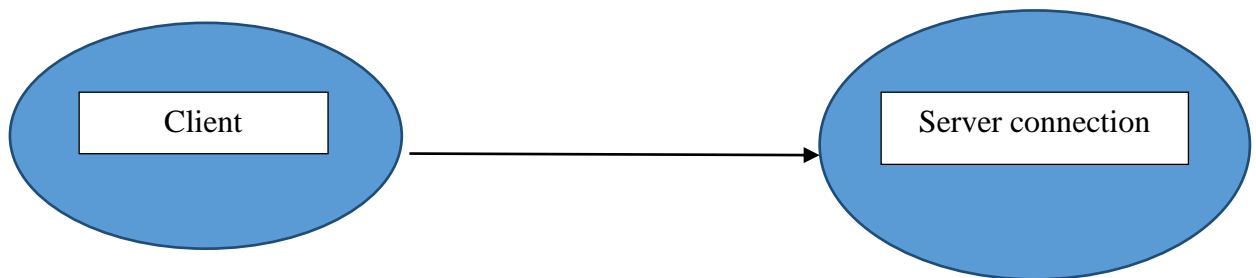
**HON'BLE MS. NAVPREET PAJRATH**

**HON'BLE MR. SEBASTIAN**

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Two representative of Google India came and described in details what net is, web and all the different things attached with net. Mr. Sabastian had commenced the session with a fact that 1 person out of 6 persons in India are internet users and out of that 40% of them are below the age of 23 and 23% are from rural areas, but now the statistics of net users have increased more due to the use of mobile phones, almost 93.3 corer people are mobile users which have net facility in them.

He explained what internet is, internet is nothing but a global system of inter connected computer system, the network can be small that is private network or there can be a large level of network that is at a state level. The internet works between the client and the server connections which have all the information and provide it to the client.



This information is transferred through TCP/IP.

- 1- Interact with internet through ISP, it provides an IP address and pass it on to all small computers.
- 2- Using TCP/IP it tells the computer to transfer and how to access it.

They also shared information on cloud computing, it is kind of a server which is used to store all your information that is data which is in digital format with the help of internet and that saved data can be accessed anytime in any computer or laptop, mobile, etc. that is the things which can be connected to internet and it is done with the help of your Gmail account address, therefore it is password protected as well.

What is web was also explained by them, it is always misunderstood that internet and web are the same things but that is not the way, the internet is the service which enables us to use the web facility. Web has different contends, one among them is URL which helps the web to take you to your desired information or a website where you can access the desired information.

There are search, portals and platforms, there are 60 million pages of information available on the web, the question is how to access that information, it can be done with the help of search portals like Google, Yahoo, etc. there are three basic steps when you enter a data for search, they are:

- 1- Crawling
- 2- Indexing
- 3- Serving

Web portals, it is easy to know what you want to look for, but a portal summarizes it and presents it to us.

What are platforms was also explained by them. Wikipedia YouTube, Facebook etc. are all different kinds of platforms. The contents on the platform are all user generated. There is also a concept of region specific platforms, think it in the terms of a train platforms that is every region have some specific platforms which can be accessed in that particular region only.

He explained what .com are, emails, instant message, video conferences, etc. are all different types of comms, when you send an email, the header is important part of the mail as it has the information of the sender and the receiver. The context is the body of the mail, there is also a facility of attachments, you can attach different files, pictures, PDF files, etc. and send with the help of mails. Instant message like what's App, etc. are all examples of instant messages, and video conference is where there is a camera connecting two different people and can chat with the help of the internet, Skype provides that kind of facility.

Now day's mobile phones are used in abundance and they are mostly in connection with the internet, the web page which is visible on the internet is different on the mobile a bit, and there is also a facility of apps, there are millions of different types of apps which one can access to. But while using internet one has to be safe as well, as the information shared on internet can be credited out. Some steps were suggested by them to be safe on internet some of them are:

- 1- Better password
- 2- 2 step verification process, that is one permanent password and other is one time password facility which the banks mostly provide, this is 2 step verification process.
- 3- Protect your device by the use of padlocks, screen locks, password protected mobiles, laptop, etc.

They also look in to the future 10 to 15 years from now there can be the facility of having mobile cards, that is all the information of your credit card can be saved on the mobile and you will just have to swipe your mobile on the machine and the payment can be made, you will not require to take your credit cards out, there can also be delivery drones available where you can purchase online and little drones will come to your house and make the delivery, this is going on in the US already to a little extent, driverless cars can also be there where you just have to feed the information of your destination in the car and the car will automatically take you to your destination, there can be solar power internet drones, it can provide internet access to larger part of the society.

**DAY 2**

This day was divided into 4 sessions.

**SESSION 5**

**E-JUSTICE: REENGINEERING THE JUDICIAL PROCESS THROUGH  
EFFECTIVE USE OF TECHNOLOGY**

**HON'BLE JUSTICE SANJEEV SACHDEVA**

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Justice Sanjeev Sachdeva commenced the session informing that Delhi High Court has couple of paperless court. He opined that the technology has changed so much, why do we still use in Judiciary the old methods? In Delhi digitization of records started from 2006 and the certified copies are being issued in digital records form, all the record till 2012 have been digitized already, 5,28,361 files have been converted, there are 1150 desktop users in their court.

Justice informed the participants, the hardware they are using and the way they are using it. They have an internal hardware store, additional screens are provided to some of the courts, adobe software, and Microsoft office, etc. are the kind of software that are provided to them, even the bare acts are provided online to them, the files are all stored in PDF form and they are stored in different folders, for example judgment folder is different, old cases folder is different, case wise folder is there, etc. in criminal cases it is made sure that all the information is uploaded on time to keep everyone up to date related to that case, there is also the facility to high light the section you want to, in the file provided on the computer, you can open two windows side by side. There is also a provision through which you can even make notes on the file as well as a different window can be used for the purpose of making the notes, and all these things will not hamper the original file, it will be intact, if the computer supports the multimedia files then you can even access the video files on it. The notes which you make in the digital format will be kept saved and you can access it anytime again if so required. This helps the judges a lot as it is time efficient and saves a lot of time of the court, it also provides a dust free environment in the court as there will be no hardcopy of the files and there will be no dust settling on them and then you will not have to clean it as well, even there is the provision of digital signature which is made available so that you can sign the digital files and authenticate it.

There the facility of external support is there, that is when digitization started then the question came as to what will happen to court fees then a system called as E-Court fees was started, and it was available at night also, the E-Court fees have a 16 digit number and a bar code along with it so that the same E-Court fees cannot be used twice. The files are scrutinized online itself and if some kind of defect is found in them there is a facility of SMS provided through which the lawyer is informed about the defects and they can come and remove them. There is a facility of digital display board outside each court, it displays the information about the case going on, the case which has been disposed of and the case which will be taken up later on, it also indicate the number of the case so that the lawyers can get to know as to when there case is going to come before the court and even inside the court room there is a display board provided. In addition to this the judges are provided with a dash board

it is like a phone screen, entire legal news are available there, the judgments, and even some articles related to the case or the legal department are made available.

The lawyers point of view was also discussed, the lawyers had an issue as to how they will digitize their records, so for that a place within the court premises was opened and a trained person was made to sit there, there the lawyer can go and give their files to him and he within hours will digitize those files and give it back to the lawyer and then the lawyer can make as many copies as he wishes to. Some of the lawyers questioned that what is there for me in the digitization process, as to why they should follow it, it was explained that it is cost effective, even E-Cause list is forwarded to the lawyers every day, almost 1200 SMS daily goes from High Court, now the facility of push message is also provide, it provides the information of the case which they want.

E-Post and E-Inspection has been started, there is an E-Post office through which summons can be send at the same time. After the article are delivered the scanned copy of it is sent to the High Court, lawyers can also track the status of the post sent by them. In the E-Inspection facility, the lawyers have to go and then there documents are inspected, a digital copy has to be given up for the inspection. The entire case history has been made available, even the order sheets.

Recently, Delhi High Court has started a system known as E-Attendance recording system, the entire staff attendance is taken with the help of this. It was suggested that the data backup can be done by storing all the digitized information in 20TB storage at National Data Centre for disaster recovery. With the help of the technology they have started a process of online recruitments, the bills are managed online, the PDF files are uploaded on the websites almost immediately after the order is passed, etc.



**SESSION 6**

**DEVELOPMENT OF TOOLS AND WEBSITES TO FACILITATE WIDER AND EASY COMMUNICATION WITH PUBLIC**

**HON'BLE JUSTICE S. TALAPATRA**

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The session was commenced by posing a question to the participants, Justice S. Talapatra wanted to know how many of the participants have visited the site of National Judicial Data Grid? Do you visit the website on regular bases? The answer to the questions was yes, they know about the site and they visit it on a regular base. When CIS was introduced, have you taken the information or data for planning out the course of distribution or are you following the old method? To this also a positive answer was given that most of the courts have planned and started the use of it. Another question which was posed to the participants was, how many of the litigants know about the website and if they don't know what are you all doing towards informing them about this website? Whether they are informed about the services which are available to them like the SMS service, the push message service, etc.? To this they replies that yes, the lawyers are informed of all these types of services and most of them are also using the services to their benefit.

Justice Talapatra informed them that they are having eight registers for the disposal of the records, etc. Justice opinioned that for some people who live outside, they only have National Judicial Data Grid as their means of information regarding the status of their case. NJDG starts showing information from 12:00 at night as it is a computer, therefore it is required by the courts to update that day's information before the 12:00 at night and if it is not updated then it will show that the site has not been updated.

The purpose of it was discusses. It was opinioned that, the information and communication technology is there to ensure quality, responsiveness and timeliness in the judicial system. You can interact with the clients on this, you can also check the details of the previous cases, even the details of very old cases can be accessed on this website, therefore it is required that you keep it up to date all the times.

It was discussed that Indian judiciary is in urgent need of re-engineering its process, it needs to include the process of digitization, need to optimize the use of its human resources and knowing about the change management by harnessing the potentiality of the available information and ICT to its fullest extent.

The objectives of NJDG was were also discussed, it was opinioned that the objective is to enhance the judicial productivity both qualitatively as well as quantitatively, also make the justice delivery system affordable, accessible, cost effective, transparent, and accountable. One way to increase the quantitativity of justice by disposing of the old cases and it can be done that until the old cases are disposed of, the backlog is finished, until then no new case will be prearranged under that court.

When the E-Court project was on track, there were two phases. In phase one of E-Court project many things were achieved, some of them are: - all the judges have laptops, they have connectivity. Everyone is aware and has been introduced to ICT environment in the judicial

system, the video conference system is also coming out, the appearance of the court can be avoided through this system, except where the process is absolutely required. Started providing Wi-Fi in the campus, etc. In phase II of the project the creation and development of the system such as video conference, hardware, digital archive, wireless LAN, etc. these are some of the things which have to be taken care. The important factor is decentralization of the district. The governments have taken the initiative to provide the courts with the hardware and software for the purpose of E-Courts and many such other initiatives have been taken up by the government.

The immediate task ahead were discussed, some of them are as follows:

- 1- Automation of case management, processes, case filing, scrutiny, etc. have to be done in a proper manner.
- 2- Provision of online services, certified copies of orders and judgments, etc. should be updated time to time.
- 3- Creation of NJDG agencies monitoring of pendency in the courts
- 4- Establishment of gateways between courts and government agencies, information exchange with the police, prison, etc. distant productivity, examination of under trial and witness through video conference.

These were some of the tasks that were discussed and have to be taken up. The difference between CIS 2.0 and CIS 1.1 was discussed. It was pointed out that in CIS 2.0 it is easy to get total pending cases, cause list, etc. pending bar chart and pending pie chart is available in it, years wise percentage of cases from the total number of cases is available, next date can be changed from home page itself, advocates can be searched name wise, entry of additional party name and result of full case details is available in it. Whereas in CIS 1.1 nothing of these mentioned facilities are there.

According to the E-Court comity report 14000 judicial officers have been trained on the use of Linux OS and 4000 court staff has been trained to operate the CIS software.

The session was concluded “It is fine to celebrate success, but it is more important to heed the lesson of failure” – Bill Gates.

**SESSION 7**

**PHASE II OF E-COURT PROJECT**

**HON'BLE JUSTICE S. TALAPATRA**

**HON'BLE JUSTICES.G. SHAH**

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Hon'ble Justice Talapatra commenced the session talking about the transition from phase I to phase II of the E-Court project:-

- 1- It is contribution of phase I, with certain development from phase I it clearly stipulate phase II.
- 2- Funding of phase II was put up and after lot of negotiation, it was accepted that the funds of phase II to be contributed certain level by central government.
- 3- Whatever was not completed in phase I that has to be completed in phase II.

What has been achieved in phase I were discussed:-

- 1- Creation of computer rooms at all courts.
- 2- Laptops to be provided.
- 3- ICT training
- 4- Development of man power
- 5- Hardware and software in each courts
- 6- Connectivity through internet
- 7- Backup
- 8- Upgrading ICT
- 9- Video conferencing in High Court and District Courts
- 10- Creation and upgradation of centralized facility of system. Etc.

What are the planes for phase II were discussed. In phase II all the E-Courts will be continued, hardware, laptops, printers, scanners, kiosk, display units, etc. at the District Court level, has to be taken up. Creation of case records, use of ICT tools, training, biometric facility, use of NIC data center, cloud computing, etc. cloud computing is new. The Supreme Court have started it and High Court in Delhi have started it. Power backup through solar energy, etc. are all the projects which are to be taken up in phase II of the project.

Justice Shah used many quotations to explain the essence of the session some of them can be detailed as follows.

“Expect the unexpected”, we are in changing form we should expect anything, video conferencing is not proper, digitization is not proper today but tomorrow it will be good. “Never underestimate your competitors” the litigants always try to misguide the judges. “Think there must be a better way” if there is any problem then we have to stop there and think for a better way to solve it. All the High Courts are not in the nomenclature of Supreme Court and yet they have not change their system to make it uniform throughout the country. In Singapore and many other developed countries it is due to nonservice of process, in some countries the proceedings is automatically recorded and send to outside companies and the companies type it down in proper manner and send it back. “If you want happiness for life

time, learn to love the work you do” the lawyers, judges, everyone should love the work they are doing in order to do a better work in that field.

The issue of security was taken up, some suggestions were made for security reasons. When you work on a system and are connected to internet for a long time then there is a chance that your files can be seen by others, if you want to avoid that then your computer should be protected with Firefox or other types of protecting software's which are available. It was pointed out that though we can use cloud computing system for our data storage, but still it is risky as it is a third person server and they can gain access to the data stored there. To avoid this the best can be done is if NIC provides servers where the data can be stored. The benefits of emails were discussed but there is one problem with it how do we get the acknowledgment of the mail sent by us. For this a solution was suggested, there is a RPost.com in this site if we use it for sending a mail then to the person we are sending the file, when the person opens the mail, without his consent a mail will be sent to the originator of the mail that the mail has been delivered or if the mail has been checked by the person or not.

**SESSION 8**

**USE OF MOBILE TECHNOLOGY IN JUDICIAL ADMINISTRATION**

**HON'BLE JUSTICE S.G. SHAH**

**HON'BLE MR. TALWANT SINGH**

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The session was commenced by Mr. Talwant Singh commenting that now mobile phone is a very powerful tool, it can be used for our day to day court use as well, it is cost efficient, easy to use, etc.

The use of mobiles phone has already started in the Court rooms for the benefit of the public at large and as well as making it easy for the courts to have connection with the people. One of the method that is been used in the court is activate the case stage alerts. The court have started to collect mobile numbers of all the litigants and clients. Next stage is to know the mobile numbers of all the witness as well. We are asking SHO's to instruct ISO to put the number of the witness in a separate sheet so that the accused will not come to know about the number of the witness and therefore won't be able to threaten him. Every time anything is happening in the court a SMS will be sent to the lawyer and the litigants. In case of under trials we can take the numbers of the talukas and one family member. Sometimes it happens that the lawyers don't inform their clients about the progress of the case, so to avoid that even their numbers will be taken and they will be informed about the progress of their case through SMS method. Now a SMS can be sent to the lawyer's at least 10 to 15 minutes before his case is about to be taken up in the court to enable his appearance in the court. Now with the help of mobile technology we can also manage the entry of the persons in the court. This is also done in order to get an ID of the person. This way we are not restricting the entry of any person it is just a method of controlling the crowd in the court, if the person conveys before in advance that he wants to sit on such date and for such case and that this is my identity then what is wrong in this? With the help of SMS facility we can do that. No one can enter the court if they don't have an SMS regarding the entry on that day for them. From 1<sup>st</sup> march we have started this system, that person who don't have the SMS those persons will not be allowed to enter the court. There is also a facility of bulk SMS for public information under this the NIC charges 3.75 paise per SMS, so all the District Court will take one user account, and if one is starting a lock adalat then a bulk SMS can be send and they all can be informed about it.

A management system has also started that the summons can be sent to witness on mobiles, witness may send reserve SMS by typing Y if he is attending or N if not attending, the cause list can be adjusted as well, the phone can be used even to check the latest cases which have been uploaded.

**SESSION 9**

**CONNECTIVITY AND LOCAL AREA NETWORK (LAN) ISSUES IN DISTRICT COURTS**

**HON'BLE JUSTICE S.G. SHAH**

**HON'BLE MR. TALWANT SINGH**

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Session was commenced by Talwant Singh, he shared with the participants that he was in E-Committee which looks after the computer system all over the world. He explained what connectivity is, it is whatever your internet bandwidth or BSNL connection is all over the world, your computer is connected with LAN. LAN is nothing it's just a wire that is connected to your server.

The connectivity issues were shared some of them are:-

- 1- First issue which was there was the switches, it is the main connection, switch need some electronic points. Mostly in lot of courts there is no UPS available. In 2<sup>nd</sup> phase the E-Comity has decided to provide UPS.
- 2- Thin client- without local storage. Network issue is there which affects the documents saving and also due to the power loss the documents are destroyed.
- 3- Leased lines work very well, but if damaged or cut by local authorities then it causes a problem as BSNL takes lot of time for restoring the same.
- 4- VPN over Broad Band (VPN<sub>o</sub>BB) which is required to transfer data. It needs static IP, it is provided for all the computers. Static IP is not provided with the BSNL. VPN<sub>o</sub>BB connections suffer the problem of frequent IP address.
- 5- SMS service work only with leased line connectivity and therefore whenever only VPN<sub>o</sub>BB connection is available, SMS service cannot be implemented.
- 6- In case of connection failure, redundant connectivity opinion is required. In phase II of project the provisions will be made.
- 7- State Wide Area Network (SWAN) doesn't connect all the courts complexes and it is an expensive network.
- 8- Except Panjab and Haryana, Kashmir and Maharashtra, SWAN is not flawlessly integrated with internet and therefore even if SWAN connectivity is available, it doesn't serve the purpose of data uploading on NJDG.
- 9- More LAN nodes required for central filing center and judicial service centers which will be addressed in phase II of the project.

Justice Shah shared some of his experience and guided the participants that ask your technician person to show you all the connectivity, then you will realize you know something as well. You can ask your technician to show you how many computers are connected to this server, he will take you to this entire network, the symbol is shown click on it. It will show all the PCs which are connected to that server. If you click on it then you will get to know who is connected to the server and can even access the files in that computers. If notes are only on internet or any machine, if it is connected to the server, then it can be seen by anyone.

There are two aspects to it,

- 1- First is to impress the technician person
- 2- You will yourself will come to know who is functioning on this computer.

There is internet but there is an intranet as well, that is it is internal link of computer in your campus, if no internet still there will be an IP address and you can still be able to access it. There is another concept known as the IOD it is nothing, the machines which are there in the houses, they all have a chip now with the help of IOD you will be able to give commands to your machines anywhere you are, with the help of your mobile.

**SESSION 10**

**DEVELOPMENT OF APPS TO FACILITATE WORK AT DISTRICT COURTS**

**HON'BLE JUSTICE S.G. SHAH**

**HON'BLE MR. TALWANT SINGH**

**AND**

**SESSION 11**

**FEEDBACK AND EVALUATION**

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Hon'ble Mr. Justice Talwant Singh shared that they have developed some mobile apps for court works. In civil matters the case is normally stuck at the summons, but mostly summons even if send are returned back. So to overcome such problems 3 to 4 apps have been created and along with it, everyone will be provided a mobile with internet connectivity and 100 rupees talk time.

One app is prepared for summons related problems only. The login for the app is the mobile number itself and the password is given to them which can be changed anytime they want to. When you open the app, on the main menu there will be pendency list, delivered list, change password, logout icons. As soon as you open the pendency list the summons reflected in red colour means the summon is pending and by opening any summons he will get to know the details of the summons along with the GPS. There is a web application available as well. When the person gets a summon he just have to enter the IP address of the case and other details will be available to him with the GPS location. With the help of GPS location the person will be able to find the address where the summons have to be delivered along with the directions to that place, and next date of the summons is also given. On reaching at the address where the summon to be delivered the person can take the picture of the house and second he has to take the picture of the signature of the person receiving it. This will be the proof that the summons has been delivered. Similarly the delivery list is prepared, and as soon as the summons is delivered it will be updated.

Second app is developed for the judges, it is E-Avkash, and Judges leave information system. There is mostly a problem that the judges take leave at any time and the lawyers and the clients are not informed of it, which in turn causes problem for them as they have to come to the court. Whenever a Judge goes on leave it is uploaded on this site and the lawyers come to know that the judge will be on leave. Leave is only to be applied through this app. The judges even if decide to take a leave in the morning 9:30, they can apply for leave from this mobile app and it will be immediately updated. The main menu will have new leave entry, leave history, and change password and logout icons. If you want to apply for leave choose the new leave entry icon then select court complex and then enter the date of leave. A page will be opened where they can select the type of leave to be applied, select it and submit, it will be uploaded on the app and other will come to know about the leave. The option of leave history keeps a track of all the leaves that have been taken. It helps the judicial officer as he doesn't have to remember number and type of leaves he had already availed as this app will keep the track of it.



The third app is for litigants and lawyers; it gives all the relevant information regarding the High Court and the District Court. It gives details of:

- 1- Cause list
- 2- Judgements
- 3- Daily orders
- 4- List of judges
- 5- High Court display board
- 6- Judge on leave
- 7- Court location with this a GPS is provided which gives the location of the court and the court room you want to go.
- 8- Contact information
- 9- Citizen charts, etc.

Any litigant can download it and can access it any time; if you go to the cause list then the details of all the cases according to the cause list will be available, and so on and so forth.

The fourth app is under process, it will have all summons and all the passes to be issued with a QR Code, and it looks like this;



It has enough information about a particular person. A person who wants to generate his own password can do so with the mobile phone but that number should be registered with the court. One time password will be provided to that person as soon as he opens the app and enters his number and even a GPS system will be provided through which he can know the way to the court room he so likes to visit.

Hon'ble Mr. Justice Shah shared that one of the reasons for delay in the judicial process is the service of the first notice or the first summons. A GPS system is being created to keep a track on the service of summons to ensure whether they are being served or not. The second issue is the problem of forwarding bulk papers, it is because there are so many papers that it becomes difficult to pass on. To avoid this problem these files will be emailed and then they can have a print of the softcopy. Another issue in the court is the non-communication or lack of communication with the lawyers and the client. The app will take care of that as well.

At the end of the session digital signature and cryptography was discussed. It was explained how the digital signature is different for all the files, that how it can never be same, and the digital signature is encrypted with the help of a hash function which is also different for all the files. There are two types of encryption: symmetric cryptography and asymmetric cryptography.

A secret key algorithm (sometimes called a **symmetric algorithm**) is a cryptographic algorithm that uses the same key to encrypt and decrypt data. The best known algorithm is the U.S. Department of Defense's Data Encryption Standard (DES).

Asymmetric cryptography or public-key cryptography is cryptography in which a pair of keys is used to encrypt and decrypt a message so that it arrives securely. Initially, a network user receives a public and private key pair from a certificate authority.

Types of cryptography:

- 1- Conventional cryptography
- 2- Data encryption standard
- 3- Public-key cryptography
- 4- Authentication
- 5- Digital signature

At the end of the enlightening session the participants were given an evaluation form to fill and to give any further suggestions for improvement.