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Safeguarding a fair hearing in online criminal proceedings

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Abstract: Shifting legal process online has transformed the legal landscape, with opportunities and challenges. Emphasizing safeguarding the legal process from the integration of the digitalization process relate to the principles of a fair trial. This research explores the implications of computerizing judicial procedures. The present study addresses long-standing concerns about maintaining fair, impartial, and transparent hearings and procedures under virtual realm, towards their integration into Courts internationally. By opting a doctrinal research methodology, the paper critically analyses primary and secondary sources, including such international human rights instruments as Article 14 of the ICCPR, legal frameworks and technological case studies. The outcome of the research is the indication that though online criminal proceedings improve access, they also put defendant 'rights at risk due to privacy concerns, technological barriers, and potential biases. New solutions have been introduced, such as the use of secure digital tools, live streaming of hearings and proper data protection to maintain procedural integrity. Ensuring a fair trial in criminal cases that are handled online is one of the most crucial components in moving legal procedures into the digital age. The particular issues are ensuring that defendant's rights are guaranteed and the way to promote accountability and transparency in the internet sphere. Using videoconferencing technology to conduct criminal Court hearing distantly or online instead of conducting a physical Courtroom is well known as "Online criminal Proceedings due to COVID-19 and technological advancements. Virtual court is popular. In conclusion, this paper highlights the need for the continuous adaptation of traditional legal principles to the digital environment. It advocates global standards and best practices to ensure that justice stays true, transparent and accessible in the age of virtual Courts.

Key words: fair hearing in virtual Court, online criminal proceedings, digitalization legal process, legal processes in digital age, online criminal trial

I-INTRODUCTION

A-Definition and Significance of online criminal proceedings

Ensuring a fair trial in criminal cases that are handled online is one of the most important elements in moving legal procedures into the digital age. The particular difficulties include making sure it is guaranteed, protecting a defendant's rights, and promoting accountability and transparency in the internet sphere. Using videoconferencing technology to conduct criminal court hearings remotely or online instead of in a physical courtroom is known as "online criminal proceedings». To put it another way, the criminal trial that takes place online is a "trial" that is held in a way that does not comprise spectators in a courtroom but allows them to access proceedings via audio and video. Virtual court hearings, often known as online criminal procedures, have become more common in recent years, mostly because to COVID-19 and technological advancements. The following are the accessibility and efficiency consequences of online criminal proceedings. In remote participation, Court procedures do away with the necessity for defendants, lawyers, witnesses, and judges to travel and attend in person by enabling participants to participate electronically. This makes it easier for people to access justice, particularly for those who live far away or have mobility issues. For process more quickly,

¹Stephen Smith, The Online Criminal Trial as a Public Trial , 51 SOUTHWEST. LAW REV. 116 (2021), Available at: https://digitalcommons.law.scu.edu/facpubs/993

E-H hearing can assist in backlog cases by removing logistical obstacles and providing more flexible schedules. During COVID-19, online criminal proceedings are crucial. The Indonesian government is well aware of it. Decision-makers in Indonesia have been compelled to limit public activities, particularly those within judicial institutions, since² the start of the 2020 coronavirus outbreak.

B-Evolution of legal processes in the Digital age

B1-Digital evidence in international criminal proceeding

Over the past few decades, courts and criminal investigators have used digital technology more often to gather information on illegal activity in both domestic and foreign legal proceedings. Today, there are a wide range of digital technologies available worldwide that have made it possible to investigate serious human rights violations³ more thoroughly. These resources include georeferenced field documentation, open-source web material, intercepted conversations, video recordings, and social media content. Due to their geographic and temporal separation from crime scenes and their reliance on domestic authorities' assistance, international criminal tribunals have been able to get around some of the issues. The use of modern technology in international criminal investigations has partially offset this⁴. The majority of international crimes take place in areas of political instability or armed conflict, which makes it more difficult to gather some types of evidence, such as witness testimony due to security concerns. However, even if tribunals must continue to rely on the assistance of both private businesses and states whose operations provide them with a substantial amount of data, contemporary technologies and gadgets may help account for evidential gaps. The use of photographs and videos as evidence in a variety of international court proceedings is not new. When the final moments of World War II were broadcast live in the courtroom at the Nuremberg trial; this technique was born. This had a big influence on how the judge evaluated the evidence. The growth of forensic medicine and the gathering, processing, and archiving of data and its metadata have expanded the role of new technology in the context of international criminal procedures. This is especially evident in the case law of the ad hoc International Criminal Tribunals⁵ and the International Criminal Court(ICC), both of which rely on ever-moreadvanced instruments⁶.

C-Efficiency and fairness in online criminal proceedings:

If the Court employs a technology strategy appropriate for the proceedings, online criminal procedures can be conducted effectively and fairly. For instance, the Queensland Court in Australia has created its own court-provided technology as part of a technical strategy to facilitate the administration of an electronic trial. After court-provided technology proved to be effective and equitable in civil proceedings, the Queenland Court also adopted this strategy in criminal cases. For example, in the well-known criminal trial of R v.Hargraves, Hargraves, and Stoten, the three defendants were found guilty of conspiring to defraud the Commonwealth of Australia out of approximately 3.7 million dollars in taxes. Trial technology provides chances to improve the fairness of trials for accused individuals, as demonstrated by the skilful application of this technical technique in Australian legal cases. Additionally, one case background explains the accusations,

²JURNAL HUKUM SASANA I Volume 9 Number 1,June 2023

³ Land,M ;Aronson,J,New Technologies for Human Rights Law and Practice,Cambridge University Press,Cambridge,2018 ,spec,p125 ff.

⁴Harmon,M.B.,Prosecuting Massive Crimes with Primitive Tools: Three Difficulties Encountered by Prosecutors in International Criminal Proceedings, Journal of International Criminal Justice,Vol.2,No.2,2004,pp.403-426

⁵As to the ICTY,see for example Prosecutor v Tolimir,Case No.IT-05-88/2-T,Judgment,12 December 2012, as regards the use of DNA analysis for the identification of the « Srebrenica-related missing »(ibid.,para 49 ff.) and of intercepted communications and aerial imagery (para 63 ff)as evidence.For the ICTR,cf.Prosecutor v Bagosora,Case No.ICTR-98-41-T,Trial Judgement and Appeals Judgement,8 December 2008 and 14 December 2011,respectively paras 2029-2031,460,where the judges based on video footage their findings on the role of the defendent as the Rwandan Minister of Defence.

⁶Freeman,L,Digital Evidence and War Crimes Prosecutions:The Impact of Digitql Technologies on International Criminal Investigations and Trials,Fordham International Law Journal,Vol.41,No 2,2018,pp.283-336

⁷Jackson,Sheryl(2010)Court-provided trial technology :efficiency and fairness for criminal trials.Common Law world Review, 39(3),PP.219-249

documentary evidence, and the use of trial technology supplied by the court to support the effectiveness and equity of criminal proceedings. Regarding the allegations, one instance is described in which three accused individuals were accused of conspiring to defraud the Commonwealth and of conspiring to falsely create a loss to the Commonwealth. The allegations cantered on the accused's conspiracy to utilize offshore accounts to avoid paying around 3.7 million in taxes between 1999 and 2005. The prosecution's charges were detailed by the Office of the Commonwealth Director of Public Prosecutions (CDPP) which said that the conspiracy to use an offshore account involved engaging in a Swiss-based scheme to evade paying personal and corporate taxes, fabricate invoices for business expenses and transfer the inflated amount into a Swiss trust account. Therefore, the Australian Crime Commission went ahead and prepared the brief to CDPP regarding the documentary evidence presented by the defendants, assigning unique identifying numbers to each document in order to ensure efficiency and justice for criminal proceedings. Following its standard procedure, CDPP sent the aforementioned documentation evidence to the Australian Securities and Investments Commission(ASIC), a third-party service provider, for scanning and uploading into the Litigation Support System (LSS) database. What exactly is Court-provided trial technology, one might wonder?

Any system or technique that makes use of electrical equipment to clearly enhance the legal process is considered court-provided technology. Furthermore, the technology and setup of the court are crucial to making the trial fair and effective. How to integrate the gear with the court setup is the question. When a trial took place at the Brisbane Supreme Court, the judge's assistant had two monitors and a computer. Regarding the usage of monitors, the guidelines and requirements for their use suggest that only the associate may watch one of them. The judge's associate, who operates the e-Court Bookshould also have control over the second monitor, which was the Court view monitor. The fact that the papers are shown on all of the monitors in the courtroom that were configured to show the court view is the subject of another instruction pertaining to the documents. Separate computer displays are available for each of the three accused individuals in the dock, the witness box, the judge's bench, the bar table, and the transcript writers. Computer monitors are also necessary for the jury¹⁰ and the press. These monitors' job is to display the court view as managed by the operator of the court book. Additionally, in relation to the e-Court book, the Court book is a compilation of documents intended for use as evidence by the parties in a trial. Additionally, a technological instrument called the e-Courtbook 11 is utilized to gather documents that the parties involved in a trial may use as evidence. When civil trials are conducted using technology provided by the court, the e-Courtbook serves as the primary point of reference for the judge, witnesses, and representatives of the parties in order to gather and consult the documents. In this instance, the Court's information technology staff contacts the CDPP'S(Common wealth Director of Public Prosecutions)information technology staff to import documents from the LSS(Litigation Support System) into a database or file via the e-Courtbook. Keep in mind that there are too many papers in the e-courtbook, and the judge suggests that they have to be converted to PDF hard copies. There are several advantages of using trial technology to protect the online fair hearing in criminal prosecutions. Activities like document retrieval and distribution, finding part documents, and jury deliberation are typically completed more rapidly. All trial participants are informed that the court book operator may retrieve any required documents. It has already been case may be handled by utilizing the Court-provided technology 12. observed that a

METHODOLOGY

⁸The charges essentially involved the one offence, but on 24May 2001 the relevant offence, under the crimes Act 1914(Cth) was replaced with a new offence under a new section(S.135.4)of the Criminal Code Act 1995(Cth). Two charges were accordingly laid so as to encompass the whole of the relevant period

⁹LLS has been used by the CDPP for about ten years, although alternative systems are currently being trialled ¹⁰Each monitor was shared between two jurors. Because of the scale of the matter, the empanelled jury included two reserve jurors

¹¹The Court's' eCourtbook'utilizes Microsoft windows Sharepoint Services,a web-based collaboration and document management platform available from Microsoft. This Software runs on a Microsoft Windows 2003 Server platform ¹²See Jackson(2008), above n. 3 at 62

In the Topic entitled:" Safeguarding a fair hearing in online criminal proceedings, Doctrinal method was used. It consisted of researching analysis, synthesis, and interpretation of primary sources, including common law review, digital laws, law and policy review, Article 14 of ICCPR and the Article 10 of UDHR. The secondary sources were the international journal, original scientific paper, articles, books and reports. The research question is: How to safeguard a fair hearing in online criminal proceedings? The primary objective of this research is to ensure that defendants receive an impartial, transparent, and just trial despite the challenges posed by the virtual environment. This includes protecting rights such as effective representation, access to evidence, witness examination, and due process while addressing issues related to technology reliability, privacy, and potential biases that may arise in a remote setting.

RESULTS

II-ENSURING THE RIGHT TO A FAIR TRIAL

International Standards

Article 14 of the International Covenant on Civil and Political Rights

1-Everyone will be treated equally in front of the Courts and tribunals. Everyone is entitled to a fair and public hearing by a qualified, independent, and impartial tribunal set up by law in order to determine any criminal charges against him or his rights and responsibilities in a legal matter. Any judgement rendered in a criminal case or suit at law shall be made public, unless the interests of juvenile persons otherwise require it, or the proceedings involve matrimonial disputes or the guardianship of children.

Article 10 of the Universal Declaration of Human Rights

In order to determine his rights and duties, as well as any criminal charges against him, everyone has the equal right to a fair and public hearing before an unbiased, independent tribunal.

Domestic fair trial right

Indian Constitution on fair trial

According to Article 21 of the Indian Constitution, no one may be deprived of their life or personal freedom unless a legally mandated is followed.

The right to defend oneself and for that purpose to adduce evidence is recognized by the parliament in terms of sub-section(2) of section 243 of code criminal procedure,1973

A-Constitutional consideration in the online realm

1-Right to a fair online public hearing

The COVID-19 pandemic was cited as the backdrop for the right to a fair and public hearing conducted online. How was the online fair and public hearing concept upheld during the COVID-19 pandemic, one could wonder? Our primary focus is on the right to a public hearing in times of emergency-online or physical ¹³. The fundamental and most important requirement for the Court's operation during the pandemicis the implementation of safety measures. One aspect of these safety precaution is physical separation. However, the public transparency principles was subject to limitations. These restrictions include eliminating all physical hearings during the first week of the pandemic ¹⁴, holding physical hearings with a small physical presence ¹⁵, and

¹³¹³Wojciechpiatek,'A Right to a Public Hearing in Times of Emergency-Online or Physical ?'(2023)14(2)International Journal for Court Administration 6.DOI :https://doi.org/10.36745/ijca.444

¹⁴ E.g.in several swiss cantons court hearings were suspended until the middle or end of April 2020.Jee.D.Kettinger,A.Lienhard,Swiss Courts facing the challenges of Covid 19,International journal for Court Administration,2021,2(12).P.6.Access to Court buildings was excluded also in other European Countries like Belgium from 16 March 2020 to 5 june 2020 and Norway from 12 March 2020 to 10 August 2020 and from 16 November 2020 to 1 December 2020 See ACA-Europe Transversal Analysis 2020.The Supreme Administrative Courts in times of Covid-19-a lesson learned,https://www.aca-europe.eu/images/media kit/aca_ surveys/2020/TRANAL 2020_EN.pdf[accessed 11 December 2022]

¹⁵Eg.in France and Ireland only a limited number of participants were permitted to be present in a courtroom with a social distancing. See ACA-Europe Transversal Analysis 2020. The Supreme Administrative Courts in times of Covid 19-a lesson

holding public hearings online to reduce the number of people who can attend the court in person. There are instances, such as the requirement that cameras be used during online hearings or that parties be present on a screen in the courtroom throughout proceedings; simply having them on the screen satisfies the requirements for a public hearing. Additionally, the Court set a requirement for the party or witness who remains throughout an online hearing ¹⁶. Furthermore, one of the tenets of online fair and public hearings is the use of a hybrid hearing format. This form addresses the fact that parties to the proceedings have the option of participating in public hearings in person or virtually. The public's access to information on the online hearing and the registration process for individuals interested in participating is another factor. Some jurisdictions find ways to tell the public about online hearing registration, such as by informing the media about the dispute.

2-17 Online criminal proceedings: Public hearing, presumption of innocence and impartiality

Online criminal proceedings must respect elementary principles such as the public hearing requirement, presumption of innocence and the impartiality of judicial process to obtain justice and fairness in the digital era. Indeed the six amendment to the United States Constitution states that: In all criminal prosecutions, the accused shall be entitled to the right to a speedy and public trial, by an impartial jury of the State...and[the right]to be informed of the nature and cause of the accusation;to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favour, and to have the assistance of counsel for his defense.(US Const.Amend VI).According to the US Constitution in the Sixth Amendment, the right to a public hearing and that of being treated in an impartial manner are upheld. Within the second principles of the US first portion of the Sixth Amendment the right to the presumption of innocence takes place during the time of adjudication." I promise the criminal defendant a fair and accurate determination of guilt or innocence, it serves as a public show of fairness, it prevents perjury, the misconduct of litigants, and the results are not found on secret bias or prejudice(Annotation3)¹⁸. In physical criminal proceeding, the US Constitution in its Sixth Amendment provides a right to a public hearing, presumption of innocence and impartiality. But we may wonder in what way these three principles are ensured in online criminal proceedings? This is that concerning the principle of impartial judge, it met with online trial. Only the most important is to select a truly impartial and attentive jury who have not a preconceived idea and is loyal. The presumption of innocence can be proved in online trial. By adding technological tool to the repertory of defense counsel, the innocent defendant is able in every opportunity to prove their innocence.

2-1-19The online criminal trial as a public trial

One must be familiar with the concepts of online and public trials in order to comprehend what an online criminal trial is as a public trial. An online trial is a judicial proceeding that takes place virtually, using video conferencing and other means, rather than in a traditional courtroom. The foundation of the online method is the absence of spectators in the same physical location as the other participants. Furthermore, "public in the context of an online criminal trial refers to the idea that the trial should be open to the public and accessible in order to guarantee justice and openness in the judicial system. The public would physically visit the courtroom in the conventional in person format. In the context of an online trial, "Public" often indicates that individuals from the general public, including the media, can virtually see the proceedings via live streaming, remote access to the Court's online platforms, or other digital methods. There is no denying that the public trial was physically

learned,https://www.aca-europe.eu/images/media_kit/aca_surveys/2020/TRANAL 2020_EN.pdf[accessed 11 December 2022]

¹⁶Ulla Held-Daab, Video verhandlung..., PP.778-779

¹⁷TRAVIS STEUBING,can online trials be fair during the COVID-19 Pandemic?Undergraduate Research office at Texas A &M University,May 2021

¹⁸ Annotation 3-Sixth Amendment'. Find Law, Thomson Reuters, constitution. findlaws.com/amendment 6/annotation 03.html#1.

¹⁹ Stephen Smith,The Online Criminal Trial as Public Trial,51 SOUTHWEST.LAW REV.116(2021),Available at:https://digitalcommons.law.scu.edu/facpubs/993

presentin all historical texts. Hearing evidence was important to Sir Thomas Smith. A public trial that allows everyone to hear what the depositors and witnesses have to say. However, in a case involving online processes, physical presence is not the foundation. An online trial should be made publicas it suggests that individuals may see and listen to the proceedings via technology. Online criminal trials have drawbacks, but they also have advantages over public trials. First, it offered a "separate viewing room" within the courthouse where the public and media could watch the proceedings live through audio and video feeds. Additionally, it offered an online option, demonstrating that those who are unable or uncomfortable traveling to the courtroom may enter the viewing room. The court will also authorize a limited number of individuals to see the trial upon a specific necessity being indicated.

3-20 Right to legal representation in online criminal proceedings

Regardless of whether the judicial process takes place in virtual or real courtroom, the right to legal representation in online hearings guarantees that the defendants have access to legal counsel, protecting due process and fair trial standards in the digital era. Defendants who fall into one of two groups are eligible for legal representation. They are both country and urbandwellers. Any defendant has the right to legal counsel, but the calibre of such counsel is determined by location or salary. In other words, the defendant will not be able to pay the lawyer the proper amount for his defense if he lives in a remote location. As a result, the lawyer provides his client with lower-quality help. However, if the defendant resides in an urban location, he can pay the fee for his aid and has access to technology. In this sense, the client can receive high-quality representation from the legal aid. Mass imprisonment and increased rural jail populations (which increased by more than 400 percent between 1970 and 2013 while certain urbain jail population rates decreased) are the results of this insufficiency public defense system²¹. In the context of legal aid, the use of video courts improved access to justice, according to the Montana Video Experiment²² study published by Montana Legal Service(MLS), the use of video court offered several advantages. Those who would be forced to appear without legal representation do so for legal reasons. By using this technology, the court may arrange and manage the courtroom calendar more effectively and at a lower cost. Additionally, both low-incme and high-income defendants have the right to legal assistance in online criminal proceedings. Expanding high-quality counsel for low-income defendants is our main priority. Defendants who are impoverished face a hazardous legal predicament. For instance, in 2005, the public defense office in Broward County, Florida implemented a policy that prohibited attorneys from advising clients to enter guilty pleas without substantive client interaction²³, while the public defender office in Missouri implemented a waitlist. Technology and virtual hearings help to increase the number of public defender offices and the scope and expertise of attorneys for low-income clients in order to provide high-quality counsel for low-income defendants. Clients may communicate with attorneys and attend court dates more easily because to technology. Additionally, it enables lawyers to operate more productively and successfully. Virtual hearings provide additional flexibility and expand access to high-quality representation, which is another advantage for improving the calibre or indigent defense.

B-Challenges posed by online platforms

1-Limited physical presence

Jenia I.Turner, Remote Criminal Justice, 53 TEX. TECH L.REV. 197(2021)

In the context of issues brought on by online platforms in criminal proceedings, limited physical presence refers to the difficulty in enforcing jurisdiction, investigation, persistence, and prosecution of online crimes because the accused, victims, or online platforms are not physically located within the borders of a legitimate

²⁰Matthew Bender, Unmuted : Solutions to safeguard constitutional rights in virtual Courtrooms and how technology can expand access to quality counsel and transparency in the criminal justice system, vol66(2021)

²¹See JACOB KANG BROWN & RAM SUBRAMANIAN, VERA INSTITUTE OF JUSTICE, OUT OF SIGHT: THE GROWTH OF JAILS IN RURAL AMERICA 9,11(2017)

²²ZORZA,Supra note 41,at 1

²³See Backus & Marcus, supra note 39, at 1033-34

jurisdiction. It is basically necessary to note that open justice is the fundamental principle and that limited physical presence is different from the rule of open justice(34)under Section 327 of the Code of Criminal Procedure, as explained in the explanation of limited physical presence in online criminal proceedings. «The place in which any criminal court is held for the purpose of inquiring into and trying any offence shall be deemed to be an open Court,to which the public may have access so far as the same can conveniently contain them», this section states unequivocally, the necessity of having the court open. The first case examined in light of the exemption to the open justice norm is Smt. Ujjam Baiv V.In the State of U.P., the authority to hold a trial in camera is essentially the same as the authority to forbid proceedings from being published. The legislation authorizing a trial in camera is lawful and does not infringe upon the fundamental right to free expression. The Code of Criminal Procedure's Section 327 promotes open trials with the widely accepted caveat that rape cases must be conducted in front of cameras. Addittionally, it is evident that a restricted physical presence is necessary during the pandemic in Texas Court when hearings are conducted remotely usng online video conferencing platforms like Zoom and Microsoft Teams²⁴ to safeguard the participant's health. Court handle cases more quickly and safely when they use video conferencing instead of in-person meeting, and judges adhere to the procedures 'fairness and legality. In the context of online criminal proceedings, restricted physical presence refers to circumstances in which specific participants-such as the defendant, counsel, or witnesses are exempt from having to physically be present in the courtroom. Rather, whether prior to or after the pandemic, remote criminal justice was employed, and little physical presence was justified, and people engage virtually through video conferencing or other online platforms.

2-25 Technological barriers for some participants

Technological barriers, such as limited access to reliable platform in internet, outdated devices, or unfamiliarity with digital platforms, can significantly hinder some participant's ability to fully engage in online criminal trial, raising concerns about fairness and accessibility. Technological barriers for some participants in online criminal trial are part of demerits of remote criminal trials. Apart from technological obstacles mentioned above, other factors exist to the limited access of some participants to the technological tools. We are going to explain below the context of technological barriers for some participants. This technological blockades affect not only the accused or vitims but also the legal professionals in the Court or out of Court. First of all, the representation of both the prosecuting and defense sides can be impaired before and during a remote criminal trial. According to survey held in the United States, which indicated that counsels coped with difficulty establishing connection with their clients during remote criminal trials, that can adversely impact the trial outcome(Harris,2023)²⁶. Moreover, there is a breakdown or lack of communication between the lawyer and client during the preparation of the case. The barriers also involves the unavailability of access to some remote criminal trial that may involve relevant evidence to investigate. Another aspect of the barriers includes the privacy of the privileged communication that the lawyer-client relationship enjoys. Some Courts face challenges in upholding the confidentiality of Attorney-client relationships while conducting online proceedings. Adding to the technological barriers context mentioned above, the issue of connectivity as well is part of technological obstacles in the application of online or remote trials. For instance, weak internet connectivity, low network speed, hardware malfunctioning and so on. Besides, other technological barriers

²⁴See infra Part III.A. In this Article, the term "remote proceedings" is used to encompassproceedings conducted via closed-circuit television or other videoconference technology, includingmodern, online-basedvideoplatforms. Becauseremoteproceedingsduringthepandemicwereconductedthrough online-based video platforms, the terms "online proceedings," "virtual proceedings," "video[conference] proceedings," and "remote proceedings" are used interchangeably to representproceedings conducted remotely, via an online video platform. During the early days of remoteproceedings, however, videotechnology was typically not online-based, so the discussion of state laws on video proceedings and of older studies of video proceedings uses "remote proceedings" and "video[conference] proceedings" to denote this past practice.

²⁵SOCIETY,LAW AND POLICY REVIEW2023,1(1),83-98

²⁶ Harris, H. (2023). The impact of remote hearing policies on racial equity in criminal case outcomes during the pandemic.RSF: The Russell Sage Foundation Journal of the Social Sciences, 9(3), 252–

appear in some participants. For example, problem of lighting. Lighting in the defendant's surroudings concerns the issues about the sound quality in a remote criminal hearing, the camera position. This brings about a misconception of judge towards the defendants. In video proceedings, it's difficult to increase the pursuit of truth. The parties may face hardship in assessing the integrity of witnesses providing testimony remotely, and the success of cross-examination may be reduced when held via video. A case study regarding examining the use of video conferencing for Attorney-Client consultations at a defence law clinic in Texas discovered that clients did not view the video consultations in a more unfavourable light than in –person consultations²⁷. Private attorney-client communications and the effect of videoconferencing in the courtroom. (Journal of International Commercial Law and Technology. 8.24-48)...

C-Adapting traditional fair trial principles to the online environment

There is a special difficulty in striking a balance between the intricacies of digital interactions and the integrity of justice when applying traditional fair trial concepts to the online setting.

1-Virtual Courtrooms

Virtual courtrooms provide an innovative answer to the adaptation of traditional fair trial principles to the online sphere by creating a virtual environment simulating major features of in-person procedures. They allow litigants to present evidence, cross-examine witnesses, and hold live hearings while observing accessibility and procedural due process. Implementing secure technology is also crucial in ensuring that the right to be heard, the right to confront adverse evidence and the impartiality of the judge are preserved in virtual proceedings, all those which are necessary to uphold the integrity of a fair trial in a virtual space. Furthermore, the central theme of this section is the appearance and participation before a virtual court²⁸. In virtual courtrooms, there are three modes of presence and participation such as the presence and participation in traditional video appearance in Court, the presence and participation in distributed Court and the Court technology configuration. The first mode explains that a defendant participates remotely while all other players are co-located in the same Courtroom. The second mode implies that all participants meet in a shared virtual space. And the third mode deals with an equal communication and production of a shared experience of remote participation. In addition, the presence and participation need to be explored within the experience of defendants in Court and the promise of technological innovation. Regarding the experiences of defendants, the place where the accused is put doesn't comply with the rule of law. The containment of defendant doesn't respect the right to a presumption of innocence. Fortunately, the promise of technological innovation related to the containment of defendants was undertaken. Other experiences of defendants were confining the one in an enclosed space in the Courtroom(Roosner etal. 2017)²⁹, issues around the use of video in Court, being at risk of unfair treatment when they are isolated at Court and being alone in a dock or on a screen. Moreover, in order to adapt traditional fair trial principles to the online environment, it is necessary to have a recourse to the video-enable court and distributed courtrooms. Video-enable court is the process of moving a defendant to a screen. In this regard, all other parties are co-located in the same courtroom. Merits of this process are improved access for those living in remote communities, low risk of violence or intimidation towards vulnerable parties, increased access to service, reduced time, spent in travels for judge, lawyers, police, witnesses, and Court Staff.

However, challenges are the act to isolate remote participants, restricts effective communication and increase stress among people who are already vulnerable (MCKAY,2015,Rowden 2018)³⁰. At last, distributed courtroom is a good practice to adapt traditional fair trial principles to the online environment. A distributed courtroom does not envisage of two or more separate spaces. All participants are present in a shared virtual space.

III-PROTECTING DEFENDANTS RIGHTS

²⁷Bellone, E. (2012). Privateattorney- client communications and the effect of videoconferencing in the courtroom. Journal of International Commercial Law and Technology. 8. 24-48.

²⁸Meredith Rossner, David Tait, Presence and participation in virtual in a virtual court, Vol 23(I)135-157, Sage, 2021

²⁹Rossner M, Tait D, McKimmie B, et al. (2017) The dock on trial: Courtroom design and the pre- sumption of innocence. *Journal of Law and Society* 44(3): 317–344.

³⁰McKayC(2015)Videolinksfromprison:Court'appearance'withincarceralspace. Law, Culture and the Humanities 14(2): 242–262

A-Privacy concerns in online criminal proceedings

1-Cybersecurity measures

In e-criminal proceedings, cybersecurity issues are important to privacy concerns, where sensitive information is protected from unauthorized access tampering or breaches that compromise the integrity of legal process. Before discussing cybersecurity measures, general privacy issues have to be explained. There are mainly three issues in this regards. The primary issues being: threat to society, internal and external threat towards privacy and mechanical device threat. According to Clarcke³¹, privacy can be classified under four categories: privacy of the person, privacy of personal behaviour, privacy of personal communication, and privacy of personal data. Those types of privacy are threatened. Secondary issues with privacy might involve tension between privacy protection and criminal investigation in the context of regulation. Lastly, in privacy international 32, many European States are unable to enforce human rights standards on privacy. Furthermore, some basic principles of data protection laws-and the Convention for the protection of individuals relating to automatic processing of personal data need to be highlighted. Some basic principles are mentioned as follows:

- -personal data should be gathered by fair and lawful means(Hereinafter termed'fair collection principle').
- -The amount of private data collected must be necessary for the purpose(S) for which the data is being collected, often referred to as the 'minimality principle'.
- -Personal data should be collected for specified and lawful purposes and not further processed in ways that are incompatible with those purposes (hereinafter referred to as 'purpose specification principles').

One of the framework related to data protection laws is the Council of European Convention for the protection of individuals with reard to automatic processing of personal data(ETS). The Convention deals with the protection of certain rights of individuals towards the free flow of information regardless of frontiers. This principle of the Convention as well is enshrined in international and European instruments on human rights (See Article 10,ECHR, Article 19, International Covenant on Civil and Political Rights). After analysing privacy issues, basic principles and Convention, we wonder if there are cybersecurity measures to sort out privacy concerns in online criminal proceedings. To handle the information as one of the cyber security measures, according to General comment 16,the UN human rights committee stated that Article 17 requires legal implementation of essential data protection guarantees in both the public and private sector. The additional cybersecurity measures based on a Dutch proposal is the declaration on human rights and the internet. The press release states that 'the Declaration is the first international attempt to draw up a framework on the issue and breaks ground by updating the principles of the European Convention on Human Rights for the cyber-age³³.

B-Addressing potential bias in online settings

1-Addressing and reducing disparities³⁴

By limiting prejudices, technological obstacles and socioeconomic variables that are likely to disproportionately affect groups in the digital legal system, we may address and reduce disparities in online criminal proceedings and provide equitable access to justice. Our main objective is to address and lessen biasrelated inequities in the criminal justice system. Biases are the root cause of inequity in the criminal justice system. In order to ensure that the system is just and equitable, biases must be addressed. Racial biasis really fairly well updated in the criminal justice system in the majority of situations. The disproportionate treatment of people based on their race or ethnicity is known as "racial bias" in the criminal justice system, and it frequently leads to unfair outcomes at several stages such as police, arrest, sentencing, and incarceration..According to case studies, person of color are more likely to be arrested, charged, and sentenced to longer jail sentences than white people. There are several reasons for discrepancy. One contributing element is the court's legal professionals'unfavorable attitude toward parties with various skin tones throughout the proceedings, particularly with regard to police enforcement, racial profiling, and institutional racism in the

³³www.edri.org/edrigram/number3.10/CoE

 $^{^{31}} Paperby Roger Clarcke, National University of Australia, www.anu.edu.au/people/Roger. Clarke/DV/Privacy.html (Clarke) and (Clar$

^{&#}x27;LeadingsurveillancesocietiesintheEUandtheWorld2007',28/12/2007, www.privacyinternational.org/article.shtml?cmd[347]=x-347-559597³²

³⁴Seediscussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/372751211

criminal justice system. The socioeconomic component is particularly important since individuals from low-income neighbourhoods are more likely than those from higher-income neighbourhoods to be arrested and given lengthier jail sentences. A strategy like broadening the diversity of law enforcement, judges and prosecutors within the criminal justice system is necessary to lessen disparities.

C-Access to legal resources and information

1-Online legal aid and support

Legal advice,representation,and guidance are provided through digital platforms, guaranteeing access to justice regardless of location. Online legal aid and support in criminal processes provide accessible,remote help to persons facing criminal accusations. Our primary focus is on the ³⁵ New Normal Era's virtual legal aid post(Posbakum). In Indonesia, legal aid posts, or Posbakum(Pos Bantuan Hukum), offer free legal assistance to those who cannot afford legal counsel. We consider the Indonesian instance about online legal aid and assistance. Article 2 of Law No. 16 of 2011 on Legal Aid, released by the Indonesian government, declares that Legal aid is found on the values of justice, equality before the law, transparency, efficacy, and accountability. Legal aid post(Posbakum) is a service that offers legal services in the form of information, consultation, and legal advice along with the preparation of legal documents required in accordance with the laws and regulations governing judicial power, general courts, religious courts, and state administrative courts, as per the Supreme Court of the Republic of Indonesia's Circular Letter No. 11 of 2010 on guidelines for providing legal aid and the Supreme Court's Regulation No. 1 of 2014 on guidelines for providing legal services for poor people in court,"

2-Providing resources in multiple languages

Providing resources in multiple languages is important in ensuring equal access to legal resources and information, breaking the barriers of language and empowering people to understand and assert their rights. The resources in multiple languages mentioned above are very essential in understanding the exchange of informations between the legal professional and the parties in online trial. These resources are based on multilingual information access ³⁶. Multilingual information access can be defined as the functionality permitting anyone to find information that is expressed in any language. According to Oard(1997), it is a selection of useful document from collections that may contain several languages. According to Clews(1988)'s statement, the engagement of libraries to providing access to multilingual information resources deals with the fact that they should lead the way in developing systems and services to foster cross-language retrieval., knowing the relating resources in multiple languages are very important such as Multilingual Information Retrieval(MLIR) and Cross-Language Information Retrieval(CLIR). Regarding the first system, people take a benefit of Information Retrieval(IR), that's to say they can get (documents contents) the findings they need. The systems basis via techniques and tools are comparison and matching the need for information with the information content of documents.

IV-CHALLENGES AND SOLUTIONS

A-Identifying common challenges in safeguarding an online fair hearing

1-Technological limitations

Technological constraints in protecting an online fair hearing include issues like ensuring dependable access to digital tools, data security and privacy, and unequal access to technology, which may suggest that the judicial process is less fair and honest. But our primary focus is on the right to a public hearing, whether it be in person or online, during emergencies. Therefore, the issues surrounding the constraints of the right to a public hearing in an emergency online hearing are related to technology limitations. There are further issues that impact the parties 'fundamental rights, including the right to privacy, trade secrets, and safety³⁷.

³⁵Advances in Social Science,Education and Humanities Research,volume 592 ;Proceedings of the 2nd International Conference on Law and Human Rights 2021(ICLR 2021

³⁶Ginevra Perugine III, Multilingual Information Access :an overview, INRC, 34(2007)

³⁷ According to the Guidelines of the Committee of Ministers of the Council of Europe on onlinedisputeresolutionmechanismsincivilandadministrative court proceedings from 16 June 2021, the court must ensure that personal data is processed with the highest privacy protection. See guideline No 33, with

B-Innovative solutions and best practices

1-Expanding access to remedies through e-Court Initiative

Through a more effective, accessible, and simplified digital platform for legal procedures, the e-Court program seeks to increase access to remedies by enabling people and businesses to settle disputes remotely, with lower costs and delays. Our main goal is to use³⁸E-Court initiative to increase access to remedies. The E-Court initiative support the use of a wide range of technologies, particularly in the area of negotiation, mediation, and arbitration, when online dispute resolution occurs. We are curious in the e-Court's initiative to provide access to remedies. What are the benefits of using online conflict resolution as opposed to in-person dispute resolution? Online dispute resolution helps people obtain remedies in less time and money, eliminates travel expenses, and lessens the need for legal assistance. Online conflict resolution procedures eliminate the need for travel, stress, inconvenience, and other expenses associated with traditional or telephone dispute settlementprocedures. In order to receive timely resolutions, they also enable customers to quickly and simply complete standard forms and submit the required files. After learning the rationale behind online dispute settlement, we will discuss E-Court projects using the US case as an example. We pay more attention to the effectiveness and accessibility of solutions. The Pilot Program was the first E-Court program in the United States. For instance, Michigan's "online dispute resolution program" can resolve traffic conflicts in four counties by working with Matterhorn, a private online dispute settlement service. These four counties are Washtenaw, Bay, Lansing, and Highland Park. This initiative involves an online portal where offenders can submit their cases and provide justifications for why they are unable to pay fines. Additionally, this tool aids in the evaluation of cases prior to a judge's decision³⁹.

V-DISCUSSION

The title"Safeguarding a fair hearing in online criminal proceedings" outlines the discussion on online criminal procedure; it covered the essentials like rights to a fair trial, transparency, accountability, and defendant protection. The introduction defines and underlines the importance of online criminal procedure tracing digital development in legal proceedings. The topic includes the contribution of digital evidence in international settings and, how efficiency and fairness in online settings can be achieved. Besides, it ensures the right for fair hearing according to international standards, constituting considerations relevant to online trial:public hearings, presumption of innocence, impartiality, and the right to be represented by counsel. On challenges such as reduced presence in physical space and technological obstacles:adaptation of a fair hearing, efforts to fair trial principles to an online setting. Concerns for protection of rights of defendants relate to privacy issues, problems of bias in digital settings, and the need of the defendants to have access to legal information. It reflects how all traditional rights and protections are maintained in virtual conditions of a trial. In addition, issues of openness, reliability of digital evidence, and responsibility of online platforms and service providers must take liability for procedural integrity. Finally, challenges and their solutions also have to be discussed. Here, common challenges in achieving fair online hearings have been identified along with innovative solutions like court initiatives that will expand access to justice and enhance the online experience in the legal sector.

VI-CONCLUSION

Concluding, the transition of online criminal process presents opportunities but also brings problems in relation to maintaining the ground right to a fair trial. The digital transformation of the legal process has been forced to adapt traditional principles such as transparency, accountability, and the protection of defendants rights. Online platforms provide greater efficiency, increased access to justice, but also complications such as technical barriers and concerns over privacy and bias. Theses complications require innovation and implementation of proactive

general comments

³⁸ AmyJ.Schmitz, *ExpandingAccesstoRemediesthroughE-CourtInitiatives*,67Buff.L.Rev.89(2019). Available at: https://digitalcommons.law.buffalo.edu/buffalolawreview/vol67/iss1/3

³⁹Anna Stolley Persky, *Michigan Program Allows People to Resolve Legal IssuesOnline*, A.B.AJ. (Dec. 2016), http://www.abajournal.com/magazine/article/home court advantage/.

solutions based on international standards of fair trial and the preservation of integrity in judicial process in the digital age.

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- 2-Universal Declaration of Human Rights(UDHR), Article 10
- 3-Indian Constitution, Article 21

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APPENDICES

List of International Legal Instruments Cited in Appendix A

Article 14 of the International Covenant on Civil and Political Rights (ICCPR)

Article 10 of the Universal Declaration of Human Rights (UDHR)

Article 21 of the Indian Constitution

Article 6 of the European Convention on Human Rights (ECHR)

Treaty for the Protection of Persons Concerning Automatic Processing of Personal Information (ETS 108)

Sixth Amendment to the United States Constitution

Appendix B: Key Case Studies and Legal Precedents

The use of technology given by the court in criminal proceedings is the subject of R v. Hargraves, Hargraves, and

Stoten

(Australia).

Open justice and trial in camera are discussed in Smt. Ujjam Baiv v. State of U.P. (India).

The Montana Video Experiment (USA) examines how access to justice is affected by video court proceedings.

A digital endeavour for resolving legal issues is the Washtenaw County Online Dispute Resolution Pilot Program (USA).

Survey on Technological Challenges in Online Criminal Proceedings (Appendix C)
The following are some of the technological obstacles that defendants and legal professionals encounter when participating in online criminal trials:

Problems with network instability and connection

Due to the digital divide, there is limited access to legal representation.

Data	privacy			and		cybersecurity			concerns	
Appendix	D:	List	of onlin	e c	ourt	platfor	ms and	l techno	ologies	used
Zoom		(Court		Не	earing		Video		Con	ference)
In	the		virtual		cou	rtroom,	N	/licrosoft		Teams
Digital	Docu	ıment	Manag	gement		System,	or	e-Cou	ırt	Book
Matterhorn	J)	United	States		Online	Di	ispute	Resolution	Į.	System)
Online	resour	ces	for	legal		aid	(Posbakum	in	In	donesia)
Appendix	E :	Compara	ntive A	nalysis	of	online	and	physical	court	trials
Standards										

Criteria	Online Criminal Proceedings	Physical Court Trials			
Accessibility	High (Remote access)	Limited (Physical presence required)			
Efficiency	Faster case resolutions	Often delayed due to logistical issues			
Privacy Concerns	High (Data security risks)	Low (In-person confidentiality)			
Technological Barriers	Significant (Connectivity issues)	Minimal			
Public Acces	Varies (Live streaming availability)	Open Courtroom			

Appendix F: Ethical Considerations and Guidelines for online criminal proceedings Providing each defendant with equitable representation Preserving the impartiality of the judiciary in virtual environments Preserving secrecy while defending right public trial the Following cybersecurity guidelines to avoid data leaks Resolving biases in digital decision-making courts' automated

Appendix G: Glossary of Terms

Digital evidence is any evidence that is provided electronically, including recordings, emails, and metadata.

A computerised infrastructure called the e-Court Initiative was created to enable distant court procedures.

A hybrid hearing is a judicial process in which some parties participate virtually and others in person.

A communication technique that makes virtual court sessions possible is videoconferencing technology.

The idea that court procedures need to be open and transparent to the general public is known as the "open justice principle."