



VERIFY THE VALIDITY OF PHOTOCOPIES OF PROOF OF MAIL QR CODE ELECTRONIC SIGNATURE AT ONLINE AND FACE-TO-FACE COURT HEARINGS

Novritsar Hasintongan Pakpahan

Pengadilan Negeri Sambas

novritsar_hp93@live.com

Abstract

The development of judicial information technology is increasingly felt its function when the world is experiencing a global COVID-19 pandemic in 2020. The pandemic requires a health protocol, namely the limitation of distance and contact between individuals in order to prevent the chain of spread of the COVID-19 outbreak. As a result, trials that are usually conducted face-to-face must be limited in order to prevent the spread of the COVID-19 outbreak. Problems arise when a lot of evidence in legal practice involves the use of letter evidence with electronic QR Code signatures that have not been regulated in procedural law, especially in terms of submitting photocopies as proof of letters such as family cards and marriage certificates. This research aims to find out and describe the techniques for judges in verifying the validity of copies or photocopies of letters with electronic QR Code signatures submitted as letter evidence in court both online and face-to-face. This type of research is normative legal research using descriptive analysis method. The results showed that the implementation of checking the validity of letter evidence must still be carried out in accordance with the provisions of criminal procedural law and civil procedural law using an android-based mobile phone through the VeryDS application issued by the Indonesian Electronic Certification

Centre or through sending QR Code electronic signature samples via the web.

Keywords: *Validity Verification; Electronic Evidence; QR Code.*

Abstrak

Perkembangan teknologi informasi peradilan semakin dirasakan fungsinya ketika dunia mengalami global pandemic COVID-19 pada tahun 2020. Pandemi tersebut mewajibkan adanya protocol kesehatan yaitu adanya Batasan jarak dan kontak antar individu agar mencegah rantai penyebaran wabah COVID-19. Akibatnya, persidangan yang biasanya dilakukan secara tatap muka harus dibatasi agar mencegah penyebaran wabah COVID-19. Permasalahan timbul ketika banyak pembuktian dalam praktik hukum yang melibatkan penggunaan bukti surat yang bertanda tangan elektronik QR Code yang belum diatur dalam hukum acara, terutama dalam hal penyerahan salinan fotokopi sebagai bukti surat seperti kartu keluarga dan akta perkawinan. Penelitian ini bertujuan untuk mengetahui dan mendiskripsikan teknik bagi hakim dalam memverifikasi keabsahan salinan atau fotokopi surat yang bertandatangan elektronik QR Code yang diajukan sebagai bukti surat di persidangan baik secara daring maupun secara tatap muka. Jenis penelitian ini adalah penelitian hukum normative dengan menggunakan metode analisis deskriptif. Hasil penelitian menunjukkan, pelaksanaan pemeriksaan keabsahan bukti surat tetap harus dilakukan sesuai dengan ketentuan hukum acara pidana dan hukum acara perdata menggunakan telepon genggam berbasis android melalui aplikasi VeryDS yang dikeluarkan oleh Balai Sertifikasi Elektronik Indonesia atau melalui pengiriman sampel tanda tangan elektronik QR Code melalui web.

Kata Kunci: *Verifikasi Keabsahan; Bukti Elektronik; QR Code.*

Introduction

The development of the times cannot be stopped, especially with the development of aspects of human life that are greatly influenced by many factors. In this case, the factor that greatly affects the

development of human life is information technology. Information technology accelerates human development in every aspect of human life and even humans, even information technology facilitates various problem solving with information technology.

In the field of law, information technology has had an impact in developing its practical implementation. For example, the National Land Agency through AHU has used information technology to facilitate the recording and registration of PTs and the reporting of wills made by Notary profession holders. In another profession of legal practitioners, namely arbitrators, the media for conducting arbitration online or online has been used by BANI. Various information technologies have been implemented by various legal practitioners to successfully resolve a legal problem so that every interest is achieved.¹

Just like the legal profession in general, the development of information technology also has an impact on the world of justice. The Supreme Court as the Highest State Institution as well as the Highest State Court has also used information technology to assist performance and realise the vision and mission of the Supreme Court, namely to create a Supreme Judicial Body. Some of the information technology that has been used by the Supreme Court is the Case Tracking Information System (SIPP) which provides convenience for court officials to track or trace case registers from the beginning of registration until the case has a legally binding product. The Supreme Court's information technology continues to be developed to the most up-to-date information technology, namely the e-Court or electronic court facility, which allows the implementation of the civil case trial process to be carried out electronically.

The existence of Supreme Court Regulation Number 3 of 2018 concerning Case Administration in Court Electronically and Supreme Court Regulation Number 1 of 2019 concerning Case Administration and Trial in Court Electronically, the implementation of electronic trials is easier and more certain legally. E-Court along with the

¹ Kurnia Rheza Randy Adinegoro, "Tantangan Implementasi Sertipikat Tanah Elektronik di Kementerian Agraria dan Tata Ruang/Badan Pertanahan Nasional Republik Indonesia", *Jurnal Ilmu Kenotariatan*, Vol. 4, No. 2, (2023), pp. 129-142.

answering process facility, namely through e-Litigation, can increasingly be applied and function in accordance with the principles upheld by Law Number 48 of 2009 concerning Judicial Power, namely the principle of easy, simple, fast, and low cost justice.

The development of judicial information technology is increasingly felt its function when the world is experiencing a global COVID-19 pandemic in 2020. The pandemic requires a health protocol, namely the limitation of distance and contact between individuals in order to prevent the chain of spread of the COVID-19 outbreak. As a result, trials that are usually conducted face-to-face must be limited in order to prevent the spread of the COVID-19 outbreak.²

Based on Supreme Court Circular Letter Number 1 of 2020 concerning Guidelines for the Implementation of Tasks During the Prevention Period of the Spread of Corona Virus Disease 2019 (Covid-19) in the Environment of the Supreme Court and the Judicial Bodies Under It, Cooperation Agreement between the Supreme Court of the Republic of Indonesia, the Attorney General's Office of the Republic of Indonesia and the Ministry of Law and Human Rights of the Republic of Indonesia Number 402/DJU/HM.01.1/4/2020, Number KEP-17/E/EJP/04/2020, Number PAS 08.HH.05.05 of 2020 concerning the Implementation of Trial Through Teleconference, the general court must carry out the trial process electronically through various information technologies that allow the implementation of teleconference.

Judicial practice has been implemented with the use of information technology. Every trial has been pursued with the optimisation of information technology, especially in ensuring convenience and security in the legal process and physical health.³

² Yusuf, "Pandemi Covid-19 Pacu Adaptasi Gunakan Teknologi Digital", [kominfo.go.id](https://www.kominfo.go.id/content/detail/32602/pandemi-covid-19-pacu-adaptasi-gunakan-teknologi%20digital/0/berita_satker), https://www.kominfo.go.id/content/detail/32602/pandemi-covid-19-pacu-adaptasi-gunakan-teknologi%20digital/0/berita_satker, diakses tanggal 20 April 2023.

³ Asep Nursobah, "Era Baru Pengadilan Indonesia: Modern dan Berbasis Teknologi Informasi", kepaniteraan.mahkamahagung.go.id. (21 Ags 2018), <https://kepaniteraan.mahkamahagung.go.id/registry-news/1605-era-baru-pengadilan-indonesia-modern-dan-berbasis-teknologi>, diakses tanggal 20 Juli 2023.

However, the development of information technology also creates problems when the legal provisions for its implementation have not been established, especially in the context of electronic signature information technology in letter evidence for civil procedure law and criminal procedure law.

Problems arise when a lot of evidence in legal practice involves the use of letter evidence with an electronic QR Code signature, while civil procedural law and criminal procedural law have not regulated checking the validity of QR Code electronic signed letter evidence, especially in terms of submitting photocopies as letter evidence such as family cards and marriage certificates. Therefore, this research focuses on the judge's technique in verifying the validity of copies or photocopies of letters with electronic QR Code signatures submitted as evidence in court both online and face-to-face.

Evidence

The dutch word proof (*bewijs*) is used in two meanings, sometimes it is interpreted as an act by which a certainty is given, sometimes also as a result of the act, namely the existence of a certainty.⁴ Meanwhile, according to the term, there are several concepts of proof adopted by jurists. Evidence in civil law is the process of proving the existence of facts or events that form the basis of a civil case.⁵

Subekti argues, proof is the steps and actions taken by a party with a legal interest to show the truth of the arguments presented in a conflict or conflict with other legal parties.⁶ Sudikno Mertokusumo,⁷ argues that proof is a basic search for judges to gain confidence in the

⁴ A. Karim Nasution, *Masalah Hukum Pembuktian dalam Proses Pidana*, (tanpa kota: tanpa penerbit, 1976), p. 22.

⁵ Helmy Abi Nurgraha, "Pembuktian dalam Hukum Acara Perdata", [djkn.kemenkeu.go.id](https://www.djkn.kemenkeu.go.id/kpknl-batam/baca-artikel/16467/Pembuktian-dalam-Hukum-Perdata.html). (26 Sep 2023), <https://www.djkn.kemenkeu.go.id/kpknl-batam/baca-artikel/16467/Pembuktian-dalam-Hukum-Perdata.html>, accessed 28 September 2023.

⁶ Subekti, *Hukum Pembuktian*, (Jakarta: Pradnya Paramitha, 2001), p. 1.

⁷ Sudikno Mertokusumo, *Hukum Acara Perdata*, (Yogyakarta: Liberty, 2006), p. 135.

truth of legal events that occur. Based on some of these opinions, it can be concluded that proof is one of the stages used in the legal process to put legal certainty on the position of a party in the event of a contradictory argument.

In practice, there are four theories used in the process of proof before the court, namely: *the first*, pure objective theory of proof. According to this theory the judge is strictly bound to the evidence and the basis of proof that has been determined by law, namely by stating that an alleged act has been proven must be based on things that have been deduced from the number of evidentiary tools that are solely based on the law.⁸

Secondly, pure subjective proof theory (*conviction in time or blood gemoedelijke over tuiging*). This theory contradicts the theory of pure objective proof because in the theory of pure subjective proof it is based on the judge's mere belief.⁹ *The third*, free theory of proof (*conviction rainsonce or vrije bewijsleer*). This theory is a doctrine/system of evidence that requires the judge to determine his belief freely without being limited by law, but the judge must be accountable for how the judge obtains confidence and then the judge is obliged to describe the reasons that form the basis of his decision, namely solely with confidence on the basis of science and logic and the judge is not bound by the evidence stipulated by law. In this system the judge can use other evidence outside the statutory provisions other evidence outside the statutory provisions.¹⁰

Fourthly, the negative statutory theory of proof (*negatief wettelijke*). In this theory, there are two things that become requirements, namely: *wettelijke*, because the evidence is valid and stipulated by law; and *negatief*, because the evidence that is valid and stipulated by law is not enough for the judge to consider that the defendant's guilt has been proven, but there must be a judge's belief.¹¹

⁸ Eddy OS. Hiaricej, *Teori dan Hukum Pembuktian*, (Jakarta: Penerbit Erlangga, 2012), p. 15.

⁹ Andi Hamzah, *Pengantar Hukum Acara Pidana di Indonesia*, (Jakarta: Penerbit Ghalia Indonesia, 1984), p. 229.

¹⁰ Eddy OS. Hiaricej, *Teori*, p. 16.

¹¹ Martiman Prodjohamidjojo, *Sistem Pembuktian dan Alat-Alat Bukti*, (Jakarta: Penerbit Ghalia Indonesia, 1983), p. 14.

Munir Fuady argues that based on the theory of evidentiary law, the law of evidence must determine firmly on whose shoulders the (*burden of proof burden of producing evidence*) must be placed. This is because on whose shoulders the burden of proof is placed by law, will determine directly how the end of a legal process in court, for example in civil cases where the parties are both unable to prove their case.¹²

Thus, if the burden of proof is placed on the plaintiff and the plaintiff cannot prove his case, the plaintiff will be deemed to have lost the case even though the defendant may not necessarily be able to prove it. Conversely, if the burden of proof is placed on the defendant and it turns out that the defendant cannot prove it, it is the defendant who will lose the case even though the plaintiff may not be able to prove it. Therefore, in determining on whose shoulders the burden of proof should be placed, the law must be quite careful and fair in its application. In addition, judges must also be wise enough.

The purpose of proof is to find out how to put an evidentiary result on the case being examined; what results and strength of evidence can be considered proportionally sufficient to prove the guilt of the defendant; and whether the completeness of proof by means of evidence is still required by the judge's belief.¹³

The burden of proof is a determination by the law of who must prove a fact in dispute in court, to prove and convince any party that the fact really happened as it was disclosed, with the legal consequence that if it cannot be proven by the party with the burden of proof, the fact is considered to have never happened as disclosed by the party who presented the fact in court.

In the realm of law, evidence is applied in criminal procedural law and civil procedural law. The difference between criminal procedure law and civil procedure law is the nature of evidence. In criminal procedure law, the applicable proof is negative statutory proof, which is a combination of positive statutory proof and proof of belief. In contrast to criminal procedure law, the applicable evidence in civil

¹² Munir Fuady, *Teori Hukum Pembuktian (Pidana dan Perdata)*, (Bandung: PT Citra Aditya Bakti, 2006), p. 45.

¹³ Djoko Sarwoko, *Penyidik, Penuntut Umum, Hakim dalam Proses Hukum Acara Pidana*, (Jakarta: Penerbit Bina Aksara, 1987), p. 2.

procedure law is *audi et alterem partem*, which is evidence that must be carried out by the party making the argument.

Electronic Signature

A signature is a written sign of a person's identity as the validity/validity of a document. In general, signatures are made using a pen which is commonly called a wet signature. But in the digital era like now the signature has changed to an electronic signature.

Soemarno Partodihardjo defines an electronic signature as a sign of a party that is poured in the form of a digital message to ensure certainty regarding the authenticity of the data without modification.¹⁴ The provisions of Article 1 point 12 of Law Number 19 of 2016 concerning Amendments to Law Number 11 of 2008 concerning Electronic Information and Transactions, formulates an electronic signature as, "a signature consisting of Electronic Information attached, associated or related to other Electronic Information used as a verification and authentication tool".

The definition of an electronic signature above shows that the purpose of an electronic signature is to ensure the validity of a message in an electronic document clearly, without the possibility of being changed or modified for other purposes. The assurance of validity is carried out based on the implementation of electronic signature creation.¹⁵

In practice, digital documents are signed using a certified Electronic Signature (ITE). A certified Electronic Signature is a signature that is used as a digital verification and authentication tool using an Electronic Certificate issued by an Indonesian Electronic Certificate Provider (PSrE) recognised by the Ministry of Communication and Information Technology.

Electronic signature providers must have a security and reliability system to prove that information attached through electronic

¹⁴ Soemarno Partodiharjo, *Tanya Jawab Sekitar Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Transaksi Elektronik*, (Jakarta: PT Gramedia Pustaka Utama, 2009), p. 20.

¹⁵ Klaus Schmeh, *Cryptography and Public Key Infrastructure on the Internet*, (Chichester: John Wiley & Sons, 2003), p. 15.

signatures cannot be changed and cannot be denied (non-repudiation principle). In the case of a dispute, the electronic signature organiser must be able to prove the reliability of its system through expert verification. This means that there needs to be a third party who certifies the electronic signature, which shows the legal subject status of the signatory (verification principle), then ensures that the signing subject does not deny the document he made later (authentication principle).¹⁶

The role of certification as referred to above is similar to that of a notary who conducts face-to-face physical verification and keeps the original document to guarantee authenticity. Government Regulation No. 82 of 2012 on the Implementation of Electronic Systems and Transactions (PP 82/2012) has regulated two models of electronic signatures: uncertified (such as a signature image that is then scanned and attached to a document) and certified. Certified signatures must be created using the services of an electronic certification organiser and evidenced by an electronic certificate.

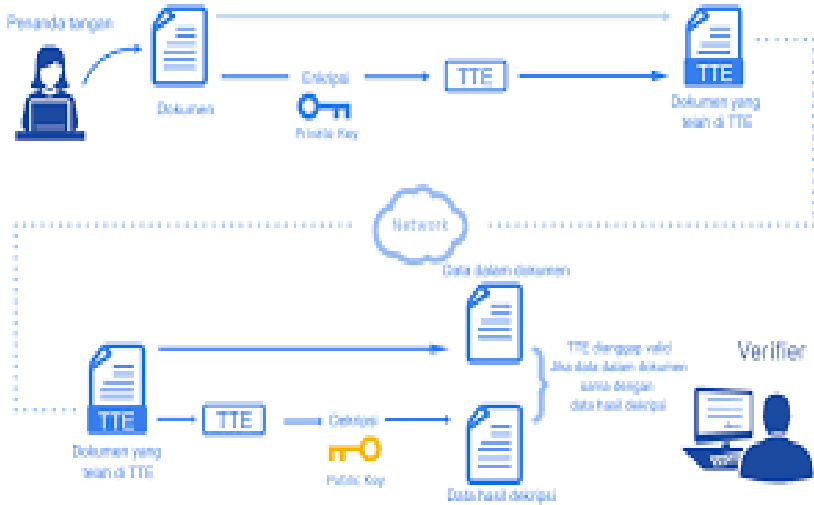
In principle, electronic signatures are structured with two components, namely document hashes and public key cryptography. In the issuance of electronic signatures, this document hash is the code or element that is tested as a messenger, while public key cryptography serves to secure or bind the public key with the public key holder.

When an electronic signature has been issued, anyone can check the validity of the electronic signature. The process can be done by taking an electronic signature from the document to be checked for validity, calculating the hash value of the document from the sample electronic signature with the original electronic signature with a public key, and then checking the status and guarantor institution of the issuing signature.¹⁷ The process of issuing and verifying electronic signatures can be seen in the following chart:

¹⁶ Aprilia Ika, "Fintech dan Tanda Tangan Elektronik", [tte.kominfo.go.id. https://tte.kominfo.go.id/blog/5db508bce2467517f4493af8](https://tte.kominfo.go.id/blog/5db508bce2467517f4493af8), accessed 12 Januari 2023.

¹⁷ Alwin Indra Fatra, R. Rizal Isnanto & Enda Wista Sinuraya, "Perancangan Infrastruktur Kunci Publik dengan Implementasi Pembuatan Kuitansi Digital Pembayaran Kursus Inggris", *Jurnal Transient*, Vol. 2, No. 3, (2013), pp. 799-804.

Chart 1
The Process of Issuing and Verification of Electronic Signatures



Source: digides¹⁸

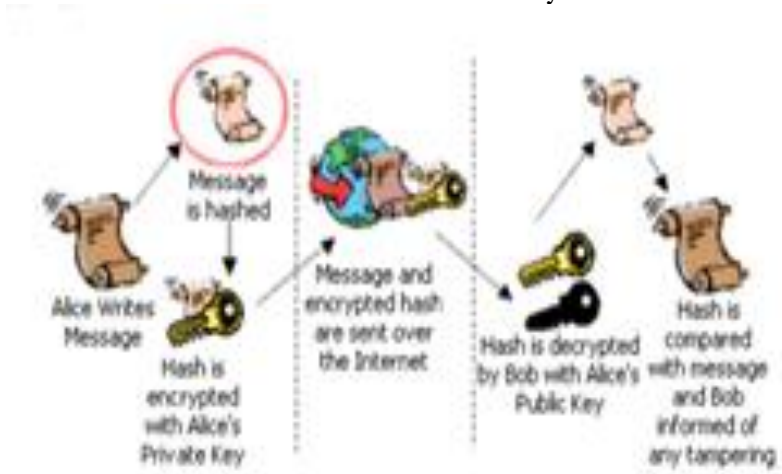
For evidentiary purposes, the principle of authentication of electronic signatures must fulfil the requirements of at least two levels of authentication, namely "what you have", "what you know", or "who you are" (Article 39 of PP 82/2012). In principle, any electronic signature that is not certified still has evidentiary value, although it is relatively weak because it can still be denied by the person concerned or easily changed by other parties. However, business actors are still hesitant in adopting a model because they are worried about the risk of liability they will bear in the event of a dispute.

The validity of an electronic signature can be confirmed to be true if there is a similarity in the hash of the document with the hash of the document issued by the electronic signature and when there is a similarity in the public key received with the public key that has been specifically held from the electronic signature issuing institution or known as the private key. When there is a discrepancy between the

¹⁸ Digides, "Apa Itu Tanda Tangan Elektronik?", digitaldesa.id. (27 Jan 2022), <https://digitaldesa.id/artikel/apa-itu-tanda-tangan-elektronik-tte>, accessed 12 Januari 2023.

public key received and the public key held by the electronic signature issuing institution, the electronic signature issuing institution and the private key holder will be informed as shown in the chart below:

Chart 2
Document Hash and Public Key Mismatch



Source: author's creation

Electronic signatures are expressed in various forms, both in the form of signatures such as images, to the form of a quick response code or QR Code. The function of the QR Code on the electronic signature in the form of a QR Code is as a marker that the document is an electronic document containing an electronic signature according to article 87 point a of ANRI Regulation 5/2021 concerning General Guidelines for Office Manuscripts; as a tool that functions to verify documents with electronic signatures, especially on printed documents. So, even though the document is printed, its authenticity can still be verified through a QR-Code scanning mechanism. With the QR-Code, documents that have been printed can still be verified by scanning the QR-Code from a smartphone camera, so that information related to the document will be seen, including the validity of the document; and as a tool to find out information or document metadata such as letter number, letter date, subject, signatory subject, and document signing time.

Both electronic signatures in the form of signature images and QR Codes apply the same electronic signature principles, namely through the use of document hashes and public keys, but electronic signatures in the form of QR Codes use scanning facilities to make it easier to send data to be verified through the Introductory Layer Security or TLS-SSL facility. The QR Code electronic signature system can be seen in the following scheme:

Chart 3
Document Hash and Public Key Mismatch



Source: author's creation

The more widely used form of electronic signature is the electronic signature in the form of a QR Code because it saves space and prevents people from imitating the original signature of the author.

Verification of Electronic Signature Letter Evidence in Online and Face-to-Face Court Hearings

In principle, judges as examiners and deciders of a case registered in court are obliged to examine the evidence presented in a trial. This examination of evidence also includes the authenticity and suitability of evidence, especially for letter evidence. This is regulated in the provisions of Article 1888 of the Civil Code which states that letter evidence only has the strength of the existence of the original deed.

Therefore, based on Jurisprudence Number 112 K/Pdt/1996 dated 17 September 1998, judges must examine letter evidence by matching the authenticity of photocopies of letter evidence with the original letter in order to have evidentiary power.

In theory, the proof of electronic signatures in court in terms of originality can be divided into two, namely: first, proof of certified electronic signatures. The evidentiary power of certified electronic signatures is very strong or has almost the same status as authentic deeds. In practice, judges, plaintiffs and defendants get information from digital certificate issuing institutions that electronic signatures are truly valid and authentic. Second, proof of electronic signatures that are not certified. For electronic signatures that are not certified, proof is carried out through a digital forensic test whose test results will be stated in the form of minutes of digital forensic testing of a system or file or document being tested. Although legally recognised, the position of this uncertified electronic signature is weaker than the certified one because there is still a possibility of manipulation or engineering.¹⁹

In practice, some legal documents that are commonly used as evidence no longer have a special distinction that certifies their authenticity compared to copies in plain paper. This can be found in Family Cards and Marriage Certificates, whose original documents were previously printed with security printing paper with anti-counterfeiting holograms and using signatures and wet stamps, as stipulated in the Minister of Home Affairs Regulation Number 7 of 2019 concerning Online Population Administration Services. Now, the original population document has use a QR Code electronic signature and does not have a unique differentiator from the copy in plain paper. Even without physically distinguishing the original document from its copy, the judge is still obliged to check the authenticity of the document submitted as evidence.

Based on the provisions of Government Regulation Number 71 of 2019 concerning the Implementation of Electronic Systems and

¹⁹ Valerie Augustine Budianto, "Begini Pembuktian Tanda Tangan Elektronik di Pengadilan", *hukumonline.com*. (30 Mar 2022), <https://www.hukumonline.com/klinik/a/begini-pembuktian-tanda-tangan-elektronik-di-pengadilan-lt62444b29a4d00/>, accessed 20 Maret 2023.

Transactions, documents that are recognised as valid electronic signatures are documents whose electronic signatures are issued by Indonesian electronic certification organiser services. In this case, there are several Indonesian electronic certification organiser services, namely the Electronic Certification Centre of the State Cyber and Crypto Agency (BSSN), PT Privy Identitas Digital, PT Solusi Net Internusa, and several other institutions. In the context of population documents issued by agencies incorporated as part of the Home Government using the services of BSSN in organising Indonesian electronic certification.

In online court hearings, based on the principle of verification as the evidentiary strength of written evidence is based on the original deed referred to in Article 1888 of the Civil Code and Jurisprudence Number 112 K/Pdt/1996 dated 17 September 1998,²⁰ judges can still conduct verification in the agenda of the evidentiary hearing by using the screen sharing feature when needed to be shown to more than one person. Then, the judge will take the QR Code electronic signature and send the data through the verification service of the Indonesian Electronic Certification Agency, namely on the website of the National Cyber and Crypto Agency (bsre.bssn.go.id) and check the suitability of the data. If the data matches, a tick will appear and mention the contents of the document. If it does not match, a red cross will appear and does not display the contents of the document.

As for the face-to-face court hearing, based on the principle of verification as referred to in Article 1888 of the Criminal Procedure Code and Jurisprudence Number 112 K/Pdt/1996 dated 17 September 1998, the judge can still verify in the agenda of the evidentiary hearing by receiving a copy of the letter evidence and using an Android-based mobile phone device to verify or check the validity of the QR Code electronic signed letter evidence through the VeryDS application issued by the verifier agency from BSSN, namely the Indonesian Electronic Certification Center. The implementation scheme is as follows:

²⁰ PrivyID, "Cara Mengidentifikasi Tanda Tangan Elektronik Palsu", [hukumonline.com](https://www.hukumonline.com). (28 Apr 2020), <https://www.hukumonline.com/klinik/a/cara-mengidentifikasi-tanda-tangan-elektronik-palsu-lt5d689c0cc9d81/>, accessed 20 Maret 2023.

Chart 4
Electronic Signature Validity Verification



Source: tandatanganelektronik.blogspot.com²¹

²¹ Tanda Tangan Elektronik, "Cara Memeriksa Keabsahan Tanda Tangan Elektronik pada Dokumen Kependudukan", <https://tandatanganelektronik.blogspot.com/2020/04/cara-memeriksa-keabsahan-tanda-tangan.html>, accessed 12 Januari 2023.

With these methods, the judge's position in examining the authenticity and validity of documentary evidence can still be maintained, especially in the context of civil procedural law and criminal procedural law so that the documentary evidence submitted has evidentiary power. This is very important considering that documentary evidence is evidence that has the strongest or most important power according to the provisions of Article 1866 Burgerlijk Wetboek and evidence that has the strongest position after witness testimony according to Article 184 paragraph (1) of the Criminal Procedure Code. Therefore, carrying out verification or checking the validity of evidence, especially documentary evidence, is important to include in the context of procedural law. Legal certainty will also be more achieved if the implementation of verification or examination of the validity of evidence, especially evidence of QR Code electronically signed letters carried out by judges, can be stated in statutory regulations or updated in Supreme Court Regulations which regulate online trials, namely Supreme Court Regulation Number 1 2019 concerning Electronic Administration of Cases and Trials in Court as well as Supreme Court Regulation Number 4 of 2020 concerning Electronic Administration and Trial of Criminal Cases in Court.

Conclusion

Letter evidence is evidence that has the highest evidentiary power in civil procedure law and the strongest after witness testimony in criminal procedure law. In the development of life, the legal world has involved a lot of use of information technology both the implementation of online trials and the use of electronic signatures on legal documents. When these two things are applied together, there are obstacles for judges to check the validity of letter evidence in face-to-face and online trials. Therefore, the implementation of checking the validity of letter evidence must still be carried out in accordance with the provisions of criminal procedural law and civil procedural law using an android-based mobile phone through the VeryDS application issued by the Indonesian Electronic Certification Centre or through sending a QR Code electronic signature sample via the web. Thus, the

evidentiary power of QR Code electronic-challenged letter evidence remains and is maintained.

Bibliography

- A. Karim Nasution, *Masalah Hukum Pembuktian dalam Proses Pidana*, (tanpa kota: tanpa penerbit, 1976).
- Alwin Indra Fatra, R. Rizal Isnanto & Enda Wista Sinuraya, "Perancangan Infrastruktur Kunci Publik dengan Implementasi Pembuatan Kuitansi Digital Pembayaran Kursus Inggris", *Jurnal Transient*, Vol. 2, No. 3, (2013).
- Andi Hamzah, *Pengantar Hukum Acara Pidana di Indonesia*, (Jakarta: Penerbit Ghalia Indonesia, 1984).
- Aprilia Ika, "Fintech dan Tanda Tangan Elektronik", tte.kominfo.go.id. <https://tte.kominfo.go.id/blog/5db508bce2467517f4493af8>, accessed 12 Januari 2023.
- Asep Nursobah, "Era Baru Pengadilan Indonesia: Modern dan Berbasis Teknologi Informasi", kepaniteraan.mahkamahagung.go.id. (21 Ags 2018), <https://kepaniteraan.mahkamahagung.go.id/registry-news/1605-era-baru-pengadilan-indonesia-modern-dan-berbasis-teknologi>, accessed 20 Juli 2023.
- Digides, "Apa Itu Tanda Tangan Elektronik?", digitaldesa.id. (27 Jan 2022), <https://digitaldesa.id/artikel/apa-itu-tanda-tangan-elektronik-tte>, accessed 12 Januari 2023.
- Djoko Sarwoko, *Penyidik, Penuntut Umum, Hakim dalam Proses Hukum Acara Pidana*, (Jakarta: Penerbit Bina Aksara, 1987).
- Eddy OS. Hiarieej, *Teori dan Hukum Pembuktian*, (Jakarta: Penerbit Erlangga, 2012).
- Helmy Abi Nurgraha, "Pembuktian dalam Hukum Acara Perdata", djkn.kemenkeu.go.id. (26 Sep 2023), <https://www.djkn.kemenkeu.go.id/kpknl-batam/baca-artikel/16467/Pembuktian-dalam-Hukum-Perdata.html>, accessed 28 September 2023.
- Klaus Schmeh, *Cryptography and Public Key Infrastructure on the Internet*, (Chichester: John Wiley & Sons, 2003).
- Kurnia Rheza Randy Adinegoro, "Tantangan Implementasi Sertipikat Tanah Elektronik di Kementerian Agraria dan Tata Ruang/Badan

- Pertanahan Nasional Republik Indonesia", *Jurnal Ilmu Kenotariatan*, Vol. 4, No. 2, (2023).
- Martiman Prodjohamidjojo, *Sistem Pembuktian dan Alat-Alat Bukti*, (Jakarta: Penerbit Ghalia Indonesia, 1983).
- Munir Fuady, *Teori Hukum Pembuktian (Pidana dan Perdata)*, (Bandung: PT Citra Aditya Bakti, 2006).
- PrivyID, "Cara Mengidentifikasi Tanda Tangan Elektronik Palsu", [hukumonline.com](https://www.hukumonline.com/klinik/a/cara-mengidentifikasi-tanda-tangan-elektronik-palsu-lt5d689c0cc9d81/). (28 Apr 2020), <https://www.hukumonline.com/klinik/a/cara-mengidentifikasi-tanda-tangan-elektronik-palsu-lt5d689c0cc9d81/>, accessed 20 Maret 2023.
- Soemarno Partodiharjo, *Tanya Jawab Sekitar Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Transaksi Elektronik*, (Jakarta: PT Gramedia Pustaka Utama, 2009).
- Subekti, *Hukum Pembuktian*, (Jakarta: Pradnya Paramitha, 2001).
- Sudikno Mertokusumo, *Hukum Acara Perdata*, (Yogyakarta: Liberty, 2006).
- Tanda Tangan Elektronik, "Cara Memeriksa Keabsahan Tanda Tangan Elektronik pada Dokumen Kependudukan", <https://tandatanganelektronik.blogspot.com/2020/04/cara-memeriksa-keabsahan-tanda-tangan.html>, accessed 12 Januari 2023.
- Valerie Agustine Budianto, "Begini Pembuktian Tanda Tangan Elektronik di Pengadilan", [hukumonline.com](https://www.hukumonline.com/klinik/a/begini-pembuktian-tanda-tangan-elektronik-di-pengadilan-lt62444b29a4d00/). (30 Mar 2022), <https://www.hukumonline.com/klinik/a/begini-pembuktian-tanda-tangan-elektronik-di-pengadilan-lt62444b29a4d00/>, accessed 20 Maret 2023.
- Yusuf, "Pandemi Covid-19 Pacu Adaptasi Gunakan Teknologi Digital", [kominfo.go.id](https://www.kominfo.go.id/content/detail/32602/pandemi-covid-19-pacu-adaptasi-gunakan-teknologi%20digital/0/berita_satker), https://www.kominfo.go.id/content/detail/32602/pandemi-covid-19-pacu-adaptasi-gunakan-teknologi%20digital/0/berita_satker, accessed 20 April 2023.