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Josua Sitompul

Department of Criminal Law and Criminology, Faculty of Law, Maastricht University, Netherlands,
josua.sitompul@maastrichtuniversity.nl

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IMPROVING THE ROLE OF EXPERTS UNDER INDONESIAN CRIMINAL PROCEDURE LAW: LESSONS LEARNED FROM THE DUTCH LEGAL SYSTEM¹

Josua Sitompul*

* Faculty of Law, Maastricht University, the Netherlands

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Corresponding author's e-mail : josua.sitompul@maastrichtuniversity.nl; josu001@kominfo.go.id.

Abstract

This article attempts to scrutinize the role of experts under the Indonesian Criminal Procedure Code (KUHP) and examine how Indonesian courts have interpreted and applied relevant rules and principles of experts in selected cybercrime cases. It finds that the main role of experts in such cases is to provide courts with opinions on the legal and technical meanings of the legal provisions at stake and their contextualization in the cases. This issue raises a question as to whether law enforcement agencies comprehend the execution of the provisions. It also shows that law enforcement agencies are not always interested in conducting digital forensic examination from which electronic evidence may be produced. It emphasizes that the role of experts under the KUHP is equivocal and highlights the need to improve the role of experts and relevant principles. To improve the role of experts under Indonesian criminal law, this article describes and explains the salient features of expert evidence under Dutch law. The article concludes by providing a series of recommendations.

Keywords: expert, expert statement, comparative, criminal justice, cybercrime, KUHP, Indonesia, Netherlands

Abstrak

Artikel ini menganalisa peranan ahli dalam KUHP dan mengkaji bagaimana pengadilan menginterpretasi dan menerapkan aturan dan prinsip tentang ahli dalam putusan-putusan cybercrime. Artikel ini menunjukkan bahwa peran utama ahli dalam kasus-kasus tersebut adalah memberikan pendapat mengenai unsur-unsur pasal pidana dan juga istilah teknis terkait serta kontekstualisasinya dalam kasus. Pertanyaannya kemudian ialah apakah aparat penegak hukum memahami penerapan pasal-pasal tersebut. Dari kasus yang dihadirkan, banyak instansi penegak hukum tidak menaruh perhatian signifikan pada pemeriksaan forensik digital yang dapat menghasilkan alat bukti elektronik. Artikel ini melihat pentingnya penentu kebijakan untuk memperjelas peranan ahli. Sebagai referensi dalam membangun rekomendasi, artikel ini mendeskripsikan beberapa fitur alat bukti ahli dari sistem hukum Belanda.

Keywords: ahli, keterangan ahli, komparatif, peradilan pidana, cybercrime, KUHP, Indonesia, Belanda

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I. INTRODUCTION

Historical context between Indonesia and the Netherlands in the colonization era has entrenched civil law and inquisitorial characteristics into Indonesian criminal justice system; some important features of these characteristics are preserved in Act 8/1981 on Criminal Procedure Law (KUHAP).² As a general overview, one fundamental similarity between the countries is on rules of evidence, which comprise ‘negative system of legal proof’ (*negatief-wettelijk bewijsstelsel*),³ limitation of evidence,⁴ and immediacy principle.⁵ The active judge role as the primary and independent authority to investigate the *dossier*, including witness, defendant, and experts in court, is inherently part of the rules of evidence.⁶ Nevertheless, within the last 35 years, ample consideration has been given to the replacement of the KUHAP and the institution of a new improved system.⁷ Thus, the government has been discussing the Bill of KUHAP (RUU KUHAP) for years. However, on the basis of Drafts 2010 and 2013,⁸ no significant changes on expert provisions have been made, unlike with the existing KUHAP.⁹ By contrast, Constitutional Court Case 67/PUU-XIII/2015 questioned problematic constitutional issues of expert provisions in the KUHAP. The applicant requested the court to provide a constitutional interpretation on how to assure the quality or competence of experts, the concrete circumstances or parameters that investigators should use to appoint an expert, and the elements of remuneration

² Indonesia, *Undang-Undang tentang Hukum Acara Pidana (Law regarding Criminal Procedure Law)*, UU No. 8 Tahun 1981, NL No. 76 Tahun 1982 (Law Number 8 Year 1981, SG No. 1981), (KUHAP) to replace *Het Herzienne Inlandsch Reglement (H.I.R)*

³ See the Netherlands, *Wetboek van Strafvordering (WSv)*, art. 338(1) and art. 183 KUHAP.

⁴ Art. 339 *WSv* and Art. 184 KUHAP.

⁵ Van Kampen summarizes that under the immediacy principle, evidence is produced and presented in court so the judge could observe, examine, and confront the evidence independently and decide if the defendant is guilty. (Petronella T.C van Kampen, *Expert Evidence Compared: Rules and Practices in the Dutch and American Criminal Justice System*, (Antwerpen: Intersentia Rechtswetenschappen, 1998), supra note 55, p. 56.) However, van der Walt emphasizes that the immediacy principle in the Dutch system has been eroded. The Supreme Court (*Hoge Raad*) accepted *testimonium de auditu* as evidence, as ruled in HR 20 December (1926) NJ 1927 85 and HR 17 June 1940, NJ 1940 772. (Lirieka Meintjes-van der Walt, *Expert Evidence in the Criminal Justice Process: A Comparative Perspective*, (Amsterdam: Rozenberg Publishers, 2001), supra note 62, p. 72.) Similarly, Indonesian Constitutional Court also accepted *hearsay* as evidence, as ruled by the Constitutional Court of the Republic of Indonesia, “Decision No. 65/PUU-VIII/2010.” The Court broadened the definition of witness not only as a person who heard, saw, and experienced an incident directly but also one who can provide information about a crime for criminal proceedings.

⁶ Kralik explains that historically, scrupulous rules of weighing evidence to be admissible at the court— as adopted by common law countries—had restrained the endeavor to find the material truth. To overcome this defect, civil law scholars established a more flexible approach for courts to appreciate and evaluate the evidence presented to them by providing them the authority to observe the trial process in court and use it to influence their decision. (in van der Walt, *Expert Evidence*, pp. 45-56.)

⁷ General Explanatory, Indonesia, *Rancangan Undang-Undang Hukum Acara Pidana, (Draft of Law Criminal Procedure Law)*, <http://ditjenpp.kemenkumham.go.id/files/ruu/2010/ruu%20kuhap.pdf> (RUU KUHAP 2010), accessed on July 23, 2016. The draft attempted to solve dissatisfactions with the implementation of KUHAP in various aspects and to update human rights protection mechanisms that Indonesia ratified.

⁸ Indonesia, *Rancangan Undang-Undang Hukum Acara Pidana, (Draft of Law Criminal Procedure Law)*, <http://www.antikorupsi.org/id/doc/ruu-kuhap-2013> (RUU KUHAP 2013), accessed on July 23, 2016. A new draft seems to have been proposed in 2014, but it does not seem to be publicly available. <http://www.dpr.go.id/berita/detail/id/8726>, accessed on July 23, 2016.

⁹ For examples: the meaning or definition of expert; obligation as an expert; sanction for refusing the appointment as an expert without valid reasons; experts’ right to compensation.

for the expert's expertise.¹⁰ Unfortunately, those drafts cannot address the issues. Therefore, those problems remain unresolved. In addition, the recent murder case of *Mirna* substantiates that the expert provisions in the KUHAP cannot answer the critical question on how the law assures equal access to evidential material (*barang bukti*)¹¹ for defendants and their legal counsel.¹²

This article attempts to investigate how Indonesian courts have interpreted and applied relevant expert rules and principles of the expert role under the KUHAP in selected cybercrime cases. The cases are not for generalization but for presenting a part of reality. Arguably, reality is an important consideration for establishing a theoretical foundation for evidence rules with regard to the role of experts under the KUHAP. To answer the question, the article deploys a qualitative methodology under the case study method. To develop recommendations from the findings, this article describes some salient features of expert rules from the Netherlands as a reference. In this regard, a comparative strategy could assist decision makers in identifying the weaknesses of the criminal procedural law and build significant options to improve or even reform it.¹³ Part II examines the concept of the KUHAP as a *code* and argues that it serves as general provisions of criminal procedure law. Part III investigates the fundamental roles and principles of experts under the KUHAP. Part IV explicates the essential cybercrime provisions of Electronic Information and Transaction Act (EITA),¹⁴ and Part V analyzes 26 cybercrime cases. Expert rules within the Dutch legal system are the main theme of Part VI, and Part VII presents the conclusion and recommendations.

II. KUHAP AS A CODE

Merryman and Perdomo (2007) argue that the essence of a *code* within civil law tradition lies not much in the form (compilation) but within its ideology.¹⁵ One

¹⁰ Constitutional Court of Republic of Indonesia, "Minutes of Case No. 67/PUU-XIII/2015." Art. 229 KUHAP stipulates reimbursement of expert's expenses. However, the applicant found disparity in the tariff for experts based on their educational level and the cases concerned. She also found that no standard of competence existed for experts and argued that without such a parameter, the principle of speedy, simple, and inexpensive trial would be hampered. The Court, however, considered that no constitutional issue existed and overruled the case. <http://www.mahkamahkonstitusi.go.id/index.php?page=web.Berita&id=11082>, accessed on July 26, 2016.

¹¹ It encompasses any physical materials that actually have evidential values but not regarded as evidence.

¹² District Court of Jakarta Pusat, Republic of Indonesia, "Decision No. 777/Pid.B/2016/PN.JKT.PST." The key evidence in the murder case was a video that could not provide a clear image to affirm the offense. The prosecutor's experts interpreted the video and concluded that the defendant put cyanide in the victim's coffee. In court, the defendant's digital forensic expert contended that a strong indication of video tampering existed and asked the evidential material to demonstrate it in court. However, the court did not give that opportunity. The defendant's legal counsel challenged the equal treatment and equal access toward the evidential material. KUHAP is silent regarding this issue.

¹³ John Hatchard, et al., ed., *Comparative Criminal Procedure*, (London: British Institute of International and Comparative Law, 1996), p. 1.

¹⁴ Indonesia, *Undang-Undang tentang Informasi dan Transaksi Elektronik (Law regarding Electronic Information and Transaction)*, UU No. 11 Tahun 2008, LN. No. 58 Tahun 2008 (Law Number 11 Year 2008, SG. No. 58 Year 2008), as amended by Indonesia, *Undang-Undang tentang Perubahan atas Undang-Undang Nomor 11 Tahun 2008 tentang Informasi dan Transaksi Elektronik (Law regarding Amendment of Law Number 11 Year 2008 regarding Electronic Information and Transaction)*, UU No. 19 Tahun 2016, LN. No. 251 Tahun 2016 (Law Number 19 Year 2016, SG. No. 251 Year 2016) ("EITA").

¹⁵ John H. Merryman and Rogelio Perez-Perdomo, *The Civil Law Tradition: An Introduction to the Legal System of Europe and Latin America*, 3rd, (California: Stanford University Press, 2007), p. 28.

conventional paradigm of a code within civil law countries—often referred to as French codification—is established based on the historical context of the separation of power between the legislature and the judiciary; the former is the primary institution in the creation of law, and the latter is the voice of the law (*la bouche de la loi*). This paradigm asserts that judges do not make the law nor are they qualified to interpret it. Thus, having a comprehensive, systematic, and coherent law is essential for the legal system. The unification of the law within a *code* is an inherent part of the ideology.¹⁶

Does Indonesia have or adopt such a concept of *code*?¹⁷ Arguably, after its independence in 1945, Indonesia had a criminal procedure *code* when it adopted HIR in establishing the unification of law in criminal justice.¹⁸ Nevertheless, the legislators of the KUHAP acknowledged that HIR lacks human rights protection. They replaced HIR not only to incorporate the human rights aspect in the rights and obligations of parties in the national criminal justice system¹⁹ but also to preserve the codification and unification of the law according to the Constitution of Indonesia and Pancasila.²⁰ Article 285 of the KUHAP states explicitly the Act as the *Code* (*Kitab*²¹) of Criminal Procedure Law (KUHAP²²). However, by scrutinizing the content and implementation of the KUHAP, one may argue that the essence of *code*, as a unifying body of law that comprises comprehensive, systematic, and coherent provisions, has already been diminished or reduced. First, to some extent, the KUHAP has served only general provisions of criminal procedure law. Since 1981, numerous acts have been promulgated that stipulate criminal procedure provisions to extend or even diverge from the KUHAP for *particular* circumstances. For example, some acts expand the scope of investigators²³ and their authorities;²⁴ detail the provisions of

¹⁶ *Ibid.* p. 29-30. Stewart underscores that the notion of *code* may encompass *collection* (accumulation of laws), *compilation* (arrangement of law based on themes), *consolidation* (classifications of laws based on areas of law), and *codification*. Codification, he describes, is a high degree of systematization of laws that is categorized according to various themes to make it comprehensive, not only based on the collection and scope, but also its depth. (Iain Stewart, "Mors Codicis: End of the Age of Codification," 27 *Tul. Eur. & Civ. L.F.* 17, (2012): 18-19.

¹⁷ See Heleen Gall, *An Introduction to Indonesian Legal history*, (2 Fundamina 144, 1996), p. 152. (The attempt to establish a unification of law in Indonesia could be traced back in 1830s. A Code was enacted in 1838; then in 1846, a Royal Decree of 16 May authorized the Governor General of East Indies to declare and apply with or without amendment the provisions of the Civil and Commercial codes to the native people in the East Indies. A Criminal Code for Natives and Foreign Orientals was established in 1873, but it was then replaced by unification of the criminal code in 1918. In essence, it was a code of pluralism.

¹⁸ General Explanatory of KUHAP.

¹⁹ Considering Part of KUHAP.

²⁰ Considering Part and General Explanatory of KUHAP.

²¹ Within Indonesian legal literature, the word *kitab* is the most used word to translate the term *wetboek*. Act 1/1946 on Criminal Law determined that the name of *Wetboek van Strafrecht voor Nederlandsh-Indie* was replaced by *Wetboek van Strafrecht* and translated into "*Kitab Undang-Undang Hukum Pidana*."

²² "KUHAP" is used in this article instead of "Indonesian Code of Criminal Procedure" because, arguably, the essence of the code as a comprehensive and unification body of law is not inherent in Act 8/1981; the term *kitab* serves as general provisions.

²³ Art. 6(1) KUHAP states that Investigators *are* national police officers *and* particular civil servants pursuant to particular acts. Some acts broadened the scope. For example, Indonesia, *Undang-Undang tentang Komisi Pemberantasan Tindak Pidana Korupsi (Law regarding Commission for the Eradication of Corruption Crime)*, UU No. 30 Tahun 2002, LN No. 137 Tahun 2002 (Law Number 30 Year 2002, SG No. 137 Year 2002), ("Act 30/2002"), art. 6. Another example is Indonesia, *Undang-Undang tentang Narkotika (Law regarding Narcotics)*, UU No. 35 Tahun 2009, LN No. 143 Tahun 2009 (Law Number 35 Year 2009, SG. No. 143 Year 2009), ("Act 35/2009"), Art. 72 stipulates that the National Anti-Narcotic Agency (BNN) has special duty to investigate narcotics.

²⁴ Art. 75 Act 35/2009 and Art. 12 Act 30/2002 established the authority for the investigators to in-

the KUHAP²⁵ for particular crimes; broaden the scope of evidence stipulated in the KUHAP;²⁶ and provide additional features.²⁷ One of the consequences is that—to some extent—similar provisions of the same issue have already created conflicts, at least normatively.²⁸ The KUHAP permits this circumstance²⁹, and no concept of continuous incorporation of the scattered criminal procedure provisions is included in the KUHAP to make it comprehensive and systematic. Without any attempt to harmonize the procedures, this situation could create compartmentalization of criminal procedures.

Second, the initiators of RUU KUHAP³⁰ scrutinized the investigation, prosecution, and trial provisions of the KUHAP and proposed their improved concepts. The central themes of the KUHAP revision include the following: (1) preferred model of the Indonesian criminal justice system; (2) scope of investigation; (3) scope of evidence; and (4) role of pre-trial judges.³¹ Nevertheless, in Drafts 2010 and 2013, the ideology of codification seems to be isolated. A new robust ideology was introduced: The Indonesian criminal justice is a *mixture* of the active judge role (a traditional concept of European continental law) and equal contesting parties (a salient feature of the adversarial system).³² Both drafts follow the KUHAP as *general* provisions of criminal procedure.³³ Without giving those general provisions more detail, the new KUHAP could end up as problematic as the existing procedure law.³⁴

Since 2006, at least 49 cases³⁵ have been presented in the Constitutional Court that represented 87 attempts³⁶ to contest the coherency and constitutionality of the

tercept or wiretap information.

²⁵ Act of 30/2002 provides much more detail on preliminary investigation procedures (*penyelidikan*) of corruption offenses and expands the procedures of formal investigation (*penyidikan*) and trial examination. Similar information is found in Act 35/2002 and EITA. According to Art. 43(4) EITA, in executing searches or seizures consistent with the electronic system, investigators have to maintain the interest of public service.

²⁶ See General Explanatory on Act 30/2002; similarly, see Art. 86 Act 35/2005 and Art. 5 jo. Art. 44 EITA.

²⁷ One example is the issue of interception or wiretapping.

²⁸ Josua Sitompul, *Cyberspace, Cybercrimes, Cyberlaw: Tinjauan Aspek Hukum Pidana* (Jakarta: Tata-nusa, 2012). At least eight acts regulate interception or wiretapping.

²⁹ Article 284 KUHAP. See also an explanation of this issue in Indonesia, *Keputusan Menteri Kehakiman tentang Pedoman Pelaksanaan KUHAP*, Keputusan Menteri Kehakiman No. M.01.PW.07.03. Tahun 1982 (the Decree of Minister of Justice M.01.PW.07.03. Year 1982), Prosecution Area, Chapter VI, Transitional Provisions, Ad.B.2.

³⁰ Instead of having one significant reform, one may suggest that improving the act continuously according to needs would be a constructive practice. Lilik Mulyadi, 'RUU KUHAP dari Perspektif seorang Hakim,' presented during a panel discussion entitled "Quo Vadis RUU KUHAP: Catatan Kritis atas RUU KUHAP," 26 November 2008, accessed on July 26, 2016, <http://www.pn-bengkayang.go.id/files/download/ba68cf1a633506b>.

³¹ Syprianus Aristeus, *Perbandingan antara Penyelesaian Putusan Praperadilan dengan Kehadiran Hakim Komisaris dalam Peradilan Pidana*, (Jakarta: Badan Pembinaan Hukum Nasional, 2007).

³² Art. 4 RUU KUHAP 2010 and Art. 4 RUU KUHAP 2013. Draft 2010 emphasized that the purpose of investigation is to find the material truth, as an ideological feature of civil law concept; however, Draft 2013 eliminated it.

³³ Art. 3 RUU KUHAP 2010 and Art. 3 RUU KUHAP 2013.

³⁴ The Constitutional Court seemed in favor to support a comprehensive model act of criminal procedure law. See for example Constitutional Court of Republic of Indonesia, "Decision No. 5/PUU-VIII/2010" regarding interception. The Court considered that regulating interception in a government regulation is unconstitutional.

³⁵ For the case summary, see Josua Sitompul, "Datasets Judicial Review Cases of KUHAP Provisions Year 2006 to 2016," *DataverseNL, Dataverse* (2018), [hdl:10411/2IKNFY](https://doi.org/10.4111/2IKNFY).

³⁶ An applicant can submit more than one provision and may contest an article.

KUHAP provisions.³⁷ All applicants argued that 36 articles and 7 definitions of the KUHAP were unconstitutional.³⁸ Of the 87 attempts, most of the contested articles were related to trial provisions³⁹ (63.21%), followed by an investigation process⁴⁰ (26.43%), and some are a mixture of both.⁴¹

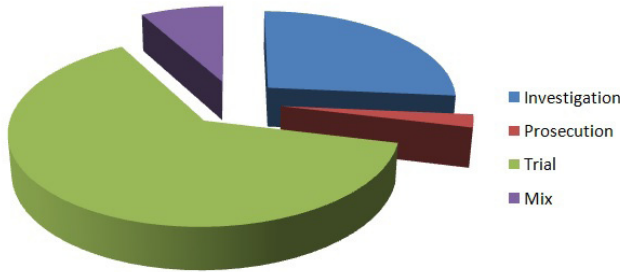


Figure 1 Scope of judicial review

Of the 49 cases, most of the applicants were suspects, defendants, convicts (63.26%), and advocates (14.28%). Four private entities and four applicants of crime (*pelapor*) were found.

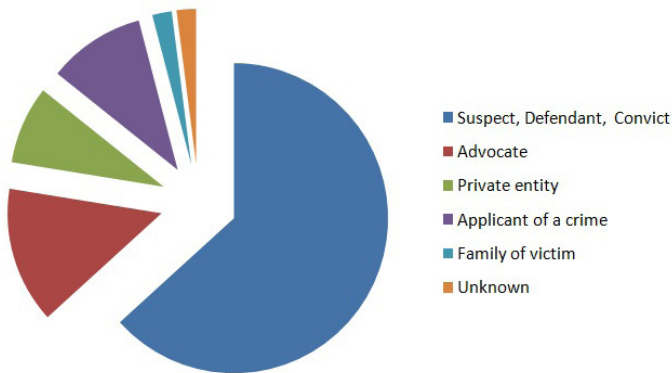


Figure 2 Categories of applicants

³⁷ The Court was established pursuant to Act 24/2003 in Constitutional Court and formally operated on October 2003. <http://www.mahkamahkonstitusi.go.id/index.php?page=web.ProfilMK&id=1>, accessed on July 21, 2016.

³⁸ Definition of investigation, preliminary investigator (*Penyelidik*), prosecutor (*Jaksa*), pre-trial examination (*Pra Peradilan*), and suspect (*Tersangka*).

³⁹ See Sitompul, "Datasets Judicial Review Cases of KUHAP"

⁴⁰ *Ibid.*

⁴¹ *Ibid.*

The Constitutional Court ruled that of the 49 cases, 28 of them were inadmissible,⁴² nine cases were overruled,⁴³ one was annulled,⁴⁴ and one was withdrawn. Only three cases were granted, and seven were partially granted.

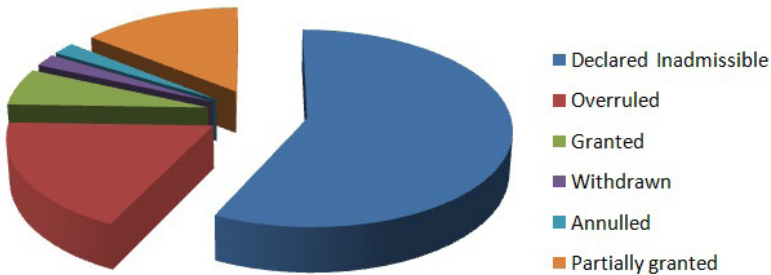


Figure 3 Decision of the court

From the brief findings, one could infer that the continuous attempts to contest the KUHAP provisions indicate dissatisfaction with the implementation of KUHAP. Judicial review,⁴⁵ detention,⁴⁶ and scope of preliminary trial examination⁴⁷ were the most frequent provisions that applicants have contested. Significant emphasis on provisions regarding trial and investigation may indicate the necessity for decision makers to scrutinize the provisions for improvement. Second, all granted applications affirm the unconstitutionality of the provisions in the KUHAP. Third, the overruled or inadmissible decisions do not automatically mean that the provisions they challenged are constitutional. Some cases in the future may bring different results. Fourth, the Court acknowledges implicitly that unclear implementation of a provision may cause problematic issues in practice. In this regard, voluminous cases of preliminary trial examination (*Praperadilan*)⁴⁸ to contest legality of coercive authorities⁴⁹ implementation (arrest, detention, seize, seizure, or termination of prosecution) are another indication.⁵⁰

⁴² *Tidak dapat diterima* means the applicant has no legal standing (e.g., Case 69/PUU-VIII/2010); the court found no specific or actual loss; or no causality was found between the loss and implementation of Act a quo (e.g., Case 10/PUU-VIII/2010).

⁴³ *Ditolak* means the applicant has legal standing but no ground for application (e.g., Case 17/PUU-XIII/2015) or has no constitutional ground because the case is not about constitutionality but implementation (e.g., Case 18/PUU-XIII/2015).

⁴⁴ *Gugur* because the applicant was deceased before the court ruled the case.

⁴⁵ Art. 268 KUHAP.

⁴⁶ *Ibid*, Art. 21

⁴⁷ *Ibid*, Art. 77 KUHAP.

⁴⁸ *Ibid*, Art. 77 KUHAP.

⁴⁹ KUHAP equips investigators with discretion in exercising their coercive authorities. Atkins and Pogrebin contended that such discretion should be guarded with consistency and transparency. (B. Atkins and M. Pogrebin, eds., *The Invisible Justice System: Discretion and the Law*, 2nd ed. (Cincinnati: Anderson Publishing, Co., 1982), p. 3.) On the other side, Damaska considered that discretion "is anathema" in continental Europe ideals. (Mirjan R. Damaska, *The Faces of Justice and State Authority: A Comparative Approach to the Legal Process* (New Haven: Yale University Press, 1986), p. 20.)

⁵⁰ A discussion on the statistics of the issue here is beyond my intention. However, to present a rough picture, by using keyword "praperadilan" in the search engine of the Supreme Court website (<http://putusan.mahkamahagung.go.id/main/pencarian/?q=praperadilan>), I found 979 cases. Presumably, the result is the tip of an iceberg.

III. ROLE OF EXPERTS UNDER INDONESIAN CRIMINAL PROCEDURE LAW

The Indonesian criminal justice system is arguably a highly compartmentalized model.⁵¹ A minimum number of checks-and-balance mechanisms seem to exist among the law enforcement agencies (investigator, prosecutor, and judge-LEAs).⁵² Investigators are the main driver in administering the investigations to collect evidence, execute investigation reports (*process verbal*), determine offenses, conclude suspects, and generate a dossier.⁵³ General prosecutors often receive almost-ready cases from the investigators; they examine cases and instruct the investigators on the basis of the dossier. Once the prosecutors accept it as sufficient, they then submit it to a competent district court. Commonly, trial judges examine all the evidence (witnesses, experts, documents, and defendants)⁵⁴ according to the dossier. However, they may also hear other witnesses or experts, requested by the parties, during the trial process.⁵⁵

Central to the negative system of legal means of evidence in Indonesia, judges have to decide the guilt of a defendant on the basis of at least two out of five legal means of evidence stipulated in the KUHAP from which they derive their conviction.⁵⁶ This process is the inquiry to find the substantive truth, whether the offense was actually conducted, and whether the defendant was the perpetrator and fulfilled all the elements of a criminal provision of which he is accused.⁵⁷ However, in many instances, LEAs are confronted with issues with which they are neither familiar nor expert in. Within such circumstances, the role of experts in the process of finding the truth arises. Science can bring clarity and certainty. However, van der Walt explicates the paradox in implementing science within the process. On the one hand, the agencies expect science to provide the definitive answer, but on the other hand, there is often no absolute truth in science.⁵⁸ Thus, criminal procedure law has to establish a proper mechanism to use the expertise of an expert⁵⁹ because, pragmatically, the onus falls on judges to base their conviction on the expert opinions that could convince them.

Hodgkinson⁶⁰ summarizes that an expert could provide an opinion that is divisible into an opinion based upon facts he affirms within the court and an explanation of technical matters or technical concepts. An expert could also provide facts pursuant to his observation or examination either based on his particular knowledge or not based on his particular knowledge but necessary for the case. In this regard, an expert does not always need to have a formal qualification pursuant to a particular branch of a science and for his expertise to be acknowledged by a professional organization;

⁵¹ See also Robert Strang, "More Adversarial, but Not Completely Adversarial: Reformasi of The Indonesian Criminal Procedure Code," *Fordham International Law Journal* 32, no. 1 (2008): 199.

⁵² *Ibid.*, p. 195.

⁵³ Dossier is a bundled collection of investigation reports and all relevant documents of the case.

⁵⁴ The court can establish evidence coherency (*petunjuk*) pursuant to Art. 188 KUHAP. Evidence coherency refers to conducts, events, or circumstances due to their interrelation one to the other or among them toward the crime that signifies that the crime occurred and its perpetrator. Evidence coherency can only be inferred from witness testimony, documents, and defendant testimony.

⁵⁵ Art. 160(1)c KUHAP.

⁵⁶ Art. 183 and Art. 184 KUHAP, namely, witness testimony, expert statement, document, evidence coherency (*petunjuk*), and defendant statement.

⁵⁷ Include if statutory defense (*strafuitsluitingsgrond*) exists.

⁵⁸ van der Walt, *Expert Evidence*, p. 5).

⁵⁹ Learned Hand, "Historical and Practical Considerations regarding Expert Testimony," *Harvard Law Review* 15, no. 1 (May, 1901): 40.

⁶⁰ Tristram Hodgkinson, *Expert Evidence: Law and Practice* (London: Sweet & Maxwell, 2007), pp.11, 70.

it could be sufficient to acknowledge the expertise pursuant to “the substance of expert’s knowledge.”⁶¹

Who is an expert under the KUHAP? What are his roles? What are the principles of experts as founded in the KUHAP? No single comprehensive concept of an expert exists within Indonesian criminal procedure law. The KUHAP defines an expert generally as a person “who has a particular expertise regarding the matter required to him to affirm the existence of an offense.”⁶² Next, the Constitutional Court describes an expert as a person “who has a particular expertise in his field either formal or informal so far that it has been acknowledged and can be proven.”⁶³ This element of *formal* or *informal* could have a significant impact in practice, such as in selecting and considering the credibility of an expert. Furthermore, Act 11/2008 provides a contextual definition; it defines an expert as a person “who has a particular expertise in the field of Information Technology whose expertise can be accounted for both academically and practically regarding his knowledge.”⁶⁴ Having all definitions, can a person who is good at digital forensics and programming without a bachelor’s degree in computer science can be considered an expert?

Article 133 of the KUHAP and its explanatory note provide an important principle of expert.⁶⁵ It stipulates that investigators have the authority to request an expert opinion from a forensic medicine doctor, doctor, or other expert in a circumstance where they suspected that a victim was injured, poisoned, or dead because of a crime. Its explanatory note states that the opinion of the forensic medicine doctor serves as a “statement of an expert” (*keterangan ahli*)⁶⁶ whereas that of a doctor (outside forensic-medical) serves as an “opinion” (*statement*).⁶⁷ One may consider that there is a degree of reliability of an expert opinion from the most to least reliable. According to the circumstances of the victim (injured, poisoned, or dead), the most reliable statement should be that from the forensic medicine doctor. However, the legislatures of the KUHAP perhaps foresaw the limitation of such expertise;⁶⁸ to overcome such inadequacy, “a doctor”⁶⁹ is the second option. Expectedly, the doctor could provide at least a general scientific explanation relevant to the case. The last option is the “other expert.” Although the KUHAP does not restrict its scope, the other expert must nonetheless have the particular knowledge required by the investigators about the matter. Furthermore, the categorization of opinion—the opinion of the forensic doctor as an “statement of an expert” and that of the doctor as a “statement”—should not serve as hierarchical evidence. A judge has the authority to weigh or assess the evidence to find the substantive truth, which is one of the court’s paramount duties. Moreover, investigators have discretion not only to determine the availability of the

⁶¹ *Ibid*, p. 66.

⁶² Art. 1.27 KUHAP.

⁶³ See Indonesian Constitutional Court, Decision 67/PUU-XIII/2015, p. 38.

⁶⁴ Art. 43(5) “h” EITA

⁶⁵ I am unaware if the following interpretation has already been suggested by other scholars.

⁶⁶ It is one out of five legal means of evidence stipulated by the KUHAP.

⁶⁷ See also an explanation of this issue in Indonesia, *Keputusan Menteri Kehakiman tentang tentang Pedoman Pelaksanaan KUHAP*, Keputusan Menteri Kehakiman No. M.01.PW.07.03. Tahun 1982 (the Decree of Minister of Justice M.01.PW.07.03. Year 1982), Investigation Area, Chapter III, No. 11 and Court Area on Expert Statement.

⁶⁸ Provincial Library and Achieve of Jakarta noted that in 2013, Indonesia was estimated to have only 100 forensic medicine doctors. http://jakartapedia.bpadjakarta.net/index.php/Spesialis_Kedokteran_Forensik_%26_Medikolegal#cite_note-2, see also <http://health.kompas.com/read/2012/05/16/14295039/Sekilas.Mengenal.Peran.Kedokteran.Forensik>, accessed on July 18, 2016.

⁶⁹ Like a general practitioner.

expertise within their jurisdiction and the possibility to access them,⁷⁰ but also to assess various factors, such as the necessity of appointing an expert and determining the scope of examination.⁷¹

The principles of reliability and hierarchical evidence based on Article 133 of the KUHAP mentioned above—to be consistent—could be applicable in other cases, such as cybercrime cases. However, as mentioned before, EITA provides a specific guideline, namely, that an expert has to have special expertise in the field of IT and whose knowledge can be accounted both academically and practically.⁷²

Another principle stipulated by the KUHAP with regard to the role of an expert is that an expert must give his statement on behalf of justice according to his best knowledge of expertise.⁷³ The principle seems to suggest that he should take an impartial role within the criminal justice system.⁷⁴ It is an ideal standard for an expert whom LEAs appoint, because they are responsible for finding the truth. In practice, however, because of their strong conviction that a suspect is the offender, investigators may assign an expert or appoint another expert⁷⁵ according to their belief without breaching the principle.⁷⁶ However, the KUHAP establishes the rights for suspects or defendants to appoint or propose an expert who can provide a favorable statement for them.⁷⁷ Thus, they may appoint an expert according to their need by staying abreast of the *impartial norm*. When the two experts are contested, the competent court has to settle the issue prudently. In this regard, the KUHAP authorizes trial judges to appoint another expert to clarify the contested matter. They can order a re-examination to be conducted either by another expert within the same institution or another competent institution.⁷⁸

Furthermore, Article 229 of the KUHAP emphasizes that an expert has the right to remuneration for the expertise he presented. In essence, the party who appointed the expert must bear the cost.⁷⁹ Implicitly, the expert works for the party who hires him. The absence of standardized elements for remuneration has caused significant disparity in expertise remuneration. This issue intertwines the impartial principle mentioned above.⁸⁰

IV. CYBERCRIME PROVISIONS IN EITA

EITA is the primary cybercrime legislation in Indonesia.⁸¹ It constitutes both substantive and procedure⁸² provisions. With regard to the former, it accommodated some provisions of the Council of Europe Convention on Cybercrime, revamped

⁷⁰ Such as distance and expenses, given that Indonesia as the largest archipelagic country.

⁷¹ Art. 120 KUHAP.

⁷² Explanatory Art. 43(5) "g."

⁷³ Art. 179 KUHAP.

⁷⁴ Having these possibilities, the role of an expert can be demanding; his statement can put the right person to jail or free a guilty person.

⁷⁵ Because the prior expert provided a statement against the investigators' expectation.

⁷⁶ See van Kampen, *Expert Evidence Compared*, p. 66

⁷⁷ Art. 65 KUHAP.

⁷⁸ Art. 180 KUHAP.

⁷⁹ See also Art. 65 KUHAP.

⁸⁰ In the Decision No. 67/PUU-XIII/2015, the applicant experienced that sufficiency of budget influenced the accessibility of an expert.

⁸¹ Its content, however, is broader than cybercrime. It regulates electronic transaction.

⁸² It expands KUHAP provisions.

particular provisions of Indonesian criminal law (KUHP), and introduced new criminal provisions.⁸³ Furthermore, one may consider that all crimes in EITA are serious offenses.⁸⁴ Of equal importance, a number of ambiguous terms and imprecise legal concepts⁸⁵ have caused problematic issues in the implementation of the provisions; Part V further substantiates this issue.

With regard to procedures of the law, EITA emphasizes that investigators execute cybercrime investigations pursuant to the KUHAP and criminal procedure provisions in EITA.⁸⁶ The provisions expand or establish parallel provisions of the KUHAP. For example, EITA determines that other than investigators from the Indonesian National Police, particular officials from the Ministry of Communication and Information Technology (MCIT) could serve as cybercrime investigators.⁸⁷ The Act stipulates that cybercrime investigation should consider the protection of privacy, integrity, and confidentiality of data, and the continuation of public services. Furthermore, search and seizure of electronic systems,⁸⁸ arrest, and detention⁸⁹ are executed according to the KUHAP.⁹⁰ EITA also expands the scope of legal means of evidence in the KUHAP. Electronic information and document *and/or* its printout can serve as admissible evidence.⁹¹ For electronic information/document to be admissible, digital forensics plays an important role particularly in preserving the integrity, accessibility, and availability of data. If the electronic evidence is admissible, then its printout is also admissible.⁹²

⁸³ See Art. 27-35 EITA. Provisions derived from KUHP are illegal content provisions in Art. 27 (pornography; gambling, defamation, extortion [*afpersing*], and threat [*afdreiging*]). Provisions that accommodate CoC are illegal access (Art. 30), illegal interception (Art. 31), data interference (Art. 32), system interference (Art. 33); misuse of device (Art. 34), and computer-related forgery (Art. 35). Offenses introduced by EITA: Art. 28 (misleading information and xenophobic content) and Art. 29 on threat of violence or intimidation. See Sitompul, *Cyberspace, Cybercrime, Cyberlaw*, Chapter 5 regarding the implementation of those substantive criminal provisions.

⁸⁴ Pursuant to Art. 2 Convention against Transnational Organized Crime and the Protocols Thereto, New York, 15 June 2000, United Nations Treaty Series, Vol. 2225, No. 39574. Serious crime is "conduct constituting an offence punishable by a maximum deprivation of liberty of at least four years or a more serious penalty." The maximum penalty of the offense in EITA is between 4 and 12 years of imprisonment.

⁸⁵ For example, Art. 29 jo. Art. 45 B EITA. This offense criminalizes threat of violence or intimidation toward an individual. In the explanatory of Art. 45B, EITA determines that this provision also applies to cyberbullying. Implementing such a provision for cyberbullying can be problematic.

⁸⁶ Art. 42 EITA.

⁸⁷ Art. 43(1) EITA. The ministerial investigators have a distinctive authority, that is, to make data or electronic system related to cybercrime inaccessible. (Art. 43(5) h. EITA)

⁸⁸ Art. 43(3).

⁸⁹ Art. 43(6).

⁹⁰ These parallel provisions are the result of EITA amendment pursuant to Act 19/2016. Compare the difference with EITA. In this regard, Sitompul pointed out that such parallel provisions are problematic. See Sitompul, *Cyberspace, Cybercrime, Cyberlaw*, pp. 314-323.

⁹¹ Art. 5 EITA

⁹² Sitompul, *Cyberspace, Cybercrimes, Cyberlaw*. (Chapter 6 explicates the issues of electronic information and documents as admissible evidence. Article 5 EITA expands KUHP in two ways. First, it adds one legal means of evidence other than regulated in KUHP: electronic information and document (or electronic evidence). Second, it also expands the scope of documents pursuant to KUHP. The printouts of electronic evidence in the form of paper may serve as documents. Therefore, if the electronic information is not admissible (because no assurance of its integrity, availability, and accessibility), then its printout should be inadmissible. However, the printouts could be served as evidential material.

V. CYBERCRIME CASE LAW

A. Findings and Analysis

For the purpose of this article, 46 cybercrime-related verdicts were collected, and 26 cybercrime cases pursuant to EITA⁹³ that emphasize the role of experts were analyzed. A general observation of the cases is presented first, and then two illegal cases are presented as examples. The findings are categorized into (1) the adversarial atmosphere in the criminal justice system; (2) the expert role that comprises the expertise of the experts, and experts as fact witness; (3) the role of a digital forensic examiner (DFE); (4) the role of digital evidence; (5) the necessity of digital forensics.

First, some cases presented the notion of adversarial system considerably.⁹⁴ Some of the defendants had the opportunity to present their experts and challenge the prosecutors.' In one case, the defendant presented as many experts as provided by the prosecutor;⁹⁵ in three cases, the defendant presented more experts than the prosecutor.⁹⁶ In one case,⁹⁷ the court explicitly took the opinion from one expert from the prosecutor and three from the defendants; the court decided the case in favor of the defendant. In another case, experts from the prosecutor and the defendant debated heavily on the implementation of the elements of one substantive criminal provision.⁹⁸ This finding describes that these defendants had sufficient resources to ensure the equality of their position toward the prosecutors.

Second, within all selected cases, the prosecutors appointed at least one expert. The expert provided technical, legal, or other knowledge that is relevant to the nature of the cases.⁹⁹ No clear pattern exists in the qualifications (educational background and working experience) of the appointed experts, except that most of them were from government institutions (in a broad sense) and academicians. Most experts appointed by the parties in court provided the operational meaning of a concept or definitions and their contextualization in the cases;¹⁰⁰ most of them were not scientific experts. This issue raises a question as to whether the LEAs comprehended the elements of the criminal provisions and their implementations, whether they needed assurance from the experts on the correct implementation of the provisions,¹⁰¹ or whether they

⁹³ The verdicts are selected from Supreme Court website that range from Art. 27 to Art. 35 EITA. For the list and summary of the 26 cases, see Josua Sitompul, "Indonesian Cybercrime Verdicts of Electronic Information and Transaction Act (EITA)", DataverseNL, Dataverse (2018), hdl:10411/IAOFMY

⁹⁴ See Robert Strang, "More Adversarial." His finding might support the establishment of the mixture principle between active judge roles and equal contesting parties in new KUHP, as mentioned above.

⁹⁵ Case District Court of Surakarta, "Decision No. 79/Pid.Sus/2013/PN.Ska"

⁹⁶ District Court of Bantul, Republic of Indonesia "Decision No. 196/Pid.Sus/2014/PN.BTL", (Case 196/Pid.Sus/2014/PN.BTL); District Court of Sungguminasa, Republic of Indonesia "Decision No. 324/Pid.B/2014/PN.SGM", and District Court of Surakarta, "Decision no. 19/Pid.Sus/2011/PN.Ska"

⁹⁷ District Court of Bantul, Case 196/Pid.Sus/2014/PN.BTL

⁹⁸ Case 79/Pid.Sus/2013/PN.Ska presented the most prevalent debate of experts among all collected cases. The experts debated issues in Art. 29 EITA: whether it is a formal or material offense, and whether there is a necessity to prove *objectively* that the person was really threatened or intimidated (if so, how).

⁹⁹ For example, the experts gave the meaning of the element "distribution" and "transmission" as stipulated in Art. 27 EITA. The court often questions whether a particular circumstance is considered "distribution" or "transmission."

¹⁰⁰ See District Court of Jambi, Republic of Indonesia "Decision No. 381/Pid.Sus/2013/PN.JMB" and District Court of Surakarta, Republic of Indonesia "Decision No. 79/Pid.Sus/2013/PN.Ska," (Case 79/Pid.Sus/2013/PN.Ska). Experts may also contextualize the case and even give an opinion that what the defendant conducted was an offense according to the prosecutor's indictment.

¹⁰¹ Unavailability of the official record may be one factor that motivated law enforcement agencies to

attempted to build a stronger position by introducing the expert statement as a legal means of evidence (*alat bukti*). Moreover, it raises a question on how the Indonesian criminal justice system implements the principle that judges know the law (*iura novit curia*).¹⁰² In this regard, one may consider whether the practice of requesting an expert opinion to explain the operational meaning of concepts and definitions and their contextualization reflects an implementation of *iura novit curia* or a reality that courts could not understand all laws.¹⁰³

Furthermore, prosecutors tend to prefer to appoint government officials as their expert. In 11 cases, prosecutors appointed officials from the MCIT. On the other side, courts considered persons who gave expert opinions not as experts but as witnesses. One defendant's counsel contested that a DFE from the national police should be considered a fact witness and not as an expert; still, the court positioned the examiner as an expert.¹⁰⁴ By contrast, in another case, a court positioned a DFE as a fact witness.¹⁰⁵ The court used the digital forensic report without listening to the examiner in court or considered the report as documentary evidence (another type of legal means of evidence).¹⁰⁶ Although witness testimony, expert statement, and document evidence are legal means of evidence according to the KUHAP, these possibilities might create vagueness with regard to the role of experts in criminal proceedings.¹⁰⁷

Third, the role of DFEs was apparent in some cases. All the examiners were from the national police, mostly from headquarters.¹⁰⁸ Although there are private DFEs outside national police, their role was not present.¹⁰⁹ No case exists where the defendant clearly contested the method or the result of a digital forensic examination. In two cases, however, both the prosecutor and the defendant appointed an expert who

call for experts to provide explanations during the criminal proceedings.

¹⁰² See Indonesia, *Undang-Undang tentang Kekuasaan Kehakiman (Law regarding Judicial Power)*, UU No. 48 Tahun 2009, LN No. 157 Tahun 2009 (Law Number 48 Year 2009, SG No. 157 Year 2009). This principle is preserved in Art. 10.

¹⁰³ Stephen L. Sass, "Foreign Law in Federal Courts," *American Journal of Comparative Law* 29, No. 97 (1981): 117 (The principle of *iura novit curia* cannot be applied to the laws of foreign countries.) See also James R. Maxeiner, "Legal Certainty: A European Alternative to American Legal Indeterminacy?," *Tulane Journal of International and Comparative Law* 15 (2007): 569-570. (The implementation of the maxim is that courts build legal theories. Thus, in Germany, there is division of labor in each type of courts (such as civil and criminal) so that judges could familiarize themselves with the law.)

¹⁰⁴ Case 79/Pid.Sus/2013/PN.Ska.

¹⁰⁵ See District Court of Purwakarta, Republic of Indonesia "Decision No. 132/Pid/B/2012/PN.PWK," (Case 132/Pid/B/2012/PN.PWK).

¹⁰⁶ See District Court of Jakarta Selatan, Republic of Indonesia "Decision No. 1550/Pid.B/2011/PN.Jkt.Sel.," (Case 1550/Pid.B/2011/PN.Jkt.Sel).

¹⁰⁷ If experts can serve both positions, then having certain criteria for each position is useful.

¹⁰⁸ When police officers from headquarters executed investigations, they tend to deploy digital forensics. See case 1550/Pid.B/2011/PN.Jkt.Sel; Case 132/Pid/B/2012/PN.PWK; District Court of Denpasar, Republic of Indonesia "Decision No. 932/Pid.B/2012/PN.Dps;" and District Court of Sukoharjo, Republic of Indonesia "Decision No. 268/Pid.Sus/2012/PN.Skh." See also District Court of Lahat, Republic of Indonesia "Decision No. 76/Pid.Sus/2014/PN.LT".

¹⁰⁹ <http://en.metrotvnews.com/tech/8ko2BPDdb-indonesian-digital-forensic-association-officially-established>, accessed on July 30, 2016. (Further research could be conducted based on this finding. One might suspect that this situation is influenced by the lack of digital forensic expertise. Such competencies are expensive to acquire. Certification may cost thousands of dollars. Investigators may summon a private DFE to execute the examination when their expertise is not available in agencies or institutions. The situation may not be the case for a defendant. Remuneration for expert as mentioned in Art. 229 KUHAP could be a constraint. Thus, the interest of the defendant to contest the case may be jeopardized.)

executed a technical examination and whose method had questionable soundness.¹¹⁰ In addition, a court permitted experts' opinion to go beyond their expertise.¹¹¹

Fourth, although digital devices (laptop, computer and hand phone) were available, the majority of the court was not always interested to examine their contents. Moreover, investigators did not always perform digital forensic examination. None of the selected cases presented electronic evidence.¹¹²

Fifth, with regard to the necessity of digital forensics, in one case, a legal expert from defendant challenged that a forensic examination was important, but the court considered that its importance should be assessed based on the context.¹¹³ One might view that such consideration is acceptable in illegal content cases, particularly online defamation¹¹⁴, because in those cases, the investigators and prosecutors seemed to emphasize their legal means of evidence on witnesses who actually *read* or *saw* the content.¹¹⁵ The prosecutors also presented printouts¹¹⁶ and relied on expert statements (either legal or communication and technical). In other illegal content cases (online gambling¹¹⁷ and pornography¹¹⁸), prosecutors were assisted by digital forensics. By contrast, in illegal cases, not having digital forensic examinations may jeopardize inquiries. Two cases are presented below. One essential question is related to how the courts could determine the existence of illegal access without digital forensic examination.

B. Case Study

1. Case 19/Pid.Sus/2011/PN.Ska

In 2009, the victim submitted a police report because he was unable to access his e-mail. He believed that the defendant changed his password. The defendant was

¹¹⁰ In District Court of Surakarta, Republic of Indonesia "Decision No. 19/Pid.Sus/2011/PN.Ska", (Case No. 19/Pid.Sus/2011/PN.Ska), one expert used evidential material (a CD) and inserted it into his own laptop. He also examined the contents of the victim's laptop without clearly implementing the digital forensic examination procedure. In the District Court of Kendal, Republic of Indonesia "Decision No. 232/Pid.B/2010/PN.Kdl" (Case 232/Pid.B/2010/PN.Kdl), the prosecutor opened a SMS on his phone in court. The expert confirmed that the SMS was in its original form.

¹¹¹ See Case 19/Pid.Sus/2011/PN.Ska and compare with District Court of Jogjakarta, Republic of Indonesia "Decision No. 139/Pid.Sus/2014/PN.YK" (Case 139/Pid.Sus/2014/PN.YK), as explicated further below.

¹¹² Further research could be executed to understand this phenomenon. Did the investigators have no procedural guidelines to present electronic information as evidence? Were the requirements to produce electronic evidence obscure or complicated?

¹¹³ Case 19/Pid.Sus/2011/PN.Ska. In case 199/Pid.B/2013/PN.Gtlo. (The court seemed to agree with the expert opinion that it was not necessary to examine the originality of a Facebook printout knowing that some witnesses themselves already saw the account directly; note that there were already 34 witnesses.)

¹¹⁴ Case 324/Pid.B/2014/PN.SGM; District Court of Purwakarta, Republic of Indonesia "Decision No. 16/Pid.B/2014/PN.Pwk," (Case 16/Pid.B/2014/PN.Pwk); Case 196/Pid.Sus/2014/PN.BTL; District Court of Serang, Republic of Indonesia, "Decision No. 124/Pid/Sus/2013/PN.Srg;" District Court of Serang, Republic of Indonesia, "Decision No. 45/Pid.Sus/2013/PN.Pt;" District Court of Gorontalo, Republic of Indonesia, "Decision No. 199/Pid.B/2013/PN.Gtlo;" and Case 232/Pid.B/2010/PN.Kdl.

¹¹⁵ In Case 199/Pid.B/2013/PN.Gtlo. (The prosecutor presented 34 witnesses.)

¹¹⁶ No clear indication exists if any defendant challenged the integrity and availability of related printouts (such as screen capture of Facebook or email).

¹¹⁷ Case 932/Pid.B/2012/PN.Dps.

¹¹⁸ District Court of Surabaya, Republic of Indonesia, "Decision No. 2191/Pid.B/2014/PN.Sby;" and District Court of Serang, Republic of Indonesia, "Decision No. 292/Pid/Sus/2012/PN.Cbn."

indicted for illegal access. In court, experts¹¹⁹ from both sides debated the existence of spyware planted by the defendant to record the victim's password. However, the court put aside its opinions and emphasized that the primary legal means of evidence in the KUHAP is witness testimony because, as the court postulated, witness testimony is first on the list of types of evidence according to hierarchy.¹²⁰ The court argued the following inference: Pursuant to Article 185(1) of the KUHAP, proving the defendant's guilt based on the testimony of one witness is insufficient. Correspondingly, the statement of one expert is insufficient to prove the defendant's guilt. Thus, *a contrario*, the statement of one expert is insufficient to state that the defendant was not guilty. On the basis of the testimony of four witnesses (all of them were police officers), which referred to the defendant's oral statement in 2009 that he could access the victim's e-mail, the court concluded as a fact that the defendant installed a modem in the victim's laptop in 2009. Furthermore, the court postulated the existence of evidence-coherency (*petunjuk*), inferring the following: Given that the defendant had printouts of the victim's e-mail, the defendant told the investigators that he opened the victim's e-mail, the e-mail was used by the victim and he never shared his password with the defendant, and the victim could not access his e-mail, then it follows that the defendant knew the password and used it, thereby explaining why the defendant had the printouts and was able to open the e-mail.

Instead of clarifying the contradictory opinions between experts regarding the existence of spyware, the court preferred to exclude all the experts' opinions and emphasized witness testimony. Digital forensic examination could have played an important role in solving the spyware issue and clarifying whether the evidential material (laptop) was contaminated. Furthermore, the court seemed to combine witness testimony with evidential material (e-mail printouts) as its ground to establish evidence coherency. Although judges have authority to determine the weight of evidence, scientific knowledge can be invaluable in providing assurance.

2. Case 139/Pid.Sus/2014/PN.YK

In this case, a travel agency reported an illegal access offense; some airplane tickets were issued without authorization and caused monetary loss. After examining the audit trail in the agency's system, the agency found that the tickets were issued from the same Internet protocol (IP) address, which was registered under the defendant's name. This defendant was the director of a company that was a sub-agent of the agency. No employee of the sub-agent admitted to issuing the tickets. The prosecutor's expert (whose statement was read in court; no cross-examination took place)¹²¹ opined that because the IP used by the perpetrator to access the agent's system was under the defendant's name, then the defendant was responsible for the IP usage because, he argued, the ISP already delegated responsibility to the defendant. Furthermore, he opined that the person who used the IP was either the defendant

¹¹⁹ The prosecutor-side expert held a master's diploma in law and worked as law lecturer in a university. For four years (2007–2011), he served as the secretary of a computer center, where he was responsible for maintaining the Internet connection in the university and for software development. He gave his opinion on the existence of a keylogger or spyware within the victim's laptop and assumed that the inability of the victim to access his email might be related to the deployment of spyware.

¹²⁰ This consideration may contradict the principle that judges weigh evidence freely. If witness testimony is set in hierarchy as the primary evidence, then judges' freedom to weigh evidence may be jeopardized.

¹²¹ The expert had technical background and competencies but gave an opinion on criminal liability.

or another person that the defendant authorized. The defendant said that she did not know who conducted the transactions. Nevertheless, the court incorporated the expert's opinion, declared the defendant guilty of illegal access, and sentenced her to probation for 10 months.

Had a thorough digital forensic examination been conducted on the computers of the sub-agent to scrutinize their logs and examine coherent links, then investigators may have found concrete facts and evidence to understand the case comprehensively. This missing approach is crucial to determine the defendant's guilt. The court neither provided a sufficient foundation on how the illegal access occurred nor established scientific arguments on the link between the defendant as the IP holder and as the perpetrator.

One might suspect that the unavailability of digital forensics to examine electronic devices in the two cases was due to insufficient tools and/or expertise. However, although that assumption prevailed, punishing a person without finding the substantive truth if the truth may be revealed with available technology is unjust, thereby potentially leading to miscarriage of justice. Policy and decision makers must cautiously consider these problematic issues.

VI. EXPERT EVIDENCE IN THE NETHERLANDS IN A NUTSHELL

The Dutch criminal justice system distinguishes between examinations that are conducted by investigative authorities (*opsporingsinstanties*) and those by experts. The first is known as investigative technical examinations (*technisch opsporingsonderzoek*). Specialists from LEAs execute this examination; they collect and secure important related materials (*sporenmateriaal*) in a crime scene. However, other specialists could execute such examination if the LEAs have no required competency. By contrast, an expert examination (*deskundigenonderzoek*) is not performed by LEAs and covers fields beyond the scope of agencies' competencies; this examination is conducted to assess or to counter the examination result obtained by agencies.¹²²

Another salient feature of the Dutch system is the role of an investigating judge in the pre-trial stage and his authority to determine the necessity of an expert. According to Article 227 *WvSv*, both prosecutors and defendants are entitled to acquire expert assistance, but they have to submit a request to the competent investigating judge. The judge will determine the necessity and may appoint one or more experts. If he so decides, then the judge will instruct the appointed expert to provide his assistance and order the expert to provide a complete report. The appointed expert will receive remuneration from the government.¹²³ Thus, the expert works for neither the prosecutor nor the defendant, but for the judge.¹²⁴ This role protects and maintains the impartiality of criminal justice.¹²⁵ Moreover, the defendant has the right to recommend persons he considers experts for the judge to appoint. In this circumstance, the judge will again determine the necessity of hiring such an expert.¹²⁶ A reason behind the role, according to van Kampen, is that even though prosecutors

¹²² This explanation is based on <http://wetten.overheid.nl/BWBR0033475/2013-06-01>, accessed on July 27, 2016.

¹²³ Art. 51j.4.

¹²⁴ Therefore, no issue should exist with regard to equal access to evidential material as may appear in Indonesian criminal justice (such as in the *Mirna* case).

¹²⁵ van Kampen, *Expert Evidence Compared*, p. 67.

¹²⁶ Translation from van Kampen, *Expert Evidence Compared*, p. 67.

and investigators have an obligation to investigate impartially, in some circumstances, they “might become convinced of the defendant’s guilt, which could in turn affect [their] investigative actions.”¹²⁷

The Act on Expert Witness within Criminal Cases (*Wet deskundige in strafzaken*) has a significant impact on the role of experts in the Dutch system; its enactment was a response toward miscarriage of justice cases.¹²⁸ The Act adds the title “The Experts” (*TITEL IIIC: De Deskundige*) into the Dutch Code of Criminal Procedure. The main role of an expert is to provide particular information or to execute a specific investigation or examination according to his specific or particular knowledge.¹²⁹ The expert must provide a true and complete written report according to his best knowledge. The scope of the expertise is divided into two broad categories: technical expert examination (*technisch deskundigenonderzoek*) and other expert examination (*overig deskundigenonderzoek*).¹³⁰ The first emphasizes technical scientific examination (such as DNA, toxicology, or handwriting test), whereas the second covers psychology or psychiatric science.¹³¹ With regard to the scope of an expert, the Supreme Court of the Netherlands accepted that the meaning of “knowledge” (*wetenschap*) refers to:¹³²

*“all special knowledge one possesses or is assumed to possess, even though such knowledge does not qualify as ‘science’ in the more limited sense of the word. This corresponds with the fact that for a long time, experts have been heard in criminal processes whose special knowledge did not make them practitioners of science.”*¹³³

Furthermore, the Act mandated expert registration for criminal justice.¹³⁴ In July 2009, to implement Article 51i(4) *WSv*, the Dutch government enacted the Decree on the Register of Court Experts in Criminal Cases, which promotes the use of selected experts by collecting and publicizing particular data of the experts.¹³⁵ It is the only reference for prosecutors¹³⁶ and can be useful for defendants. However, the Dutch courts have the authority to appoint an expert outside the register.¹³⁷ Furthermore, the government established the Experts Board, which has the authority to assess and decide the application submitted by applicants as an expert and to establish a code of conduct for registered experts.¹³⁸ The Board shall perform its duties impartially and

¹²⁷ *Ibid.*, p. 66.

¹²⁸ J.A. Nijboer, *et. al*, “Expert Registers in Criminal Cases: Governance in Criminal Proceedings”, p. 1, <http://www.rug.nl/rechten/congressen/archief/2011/governancemeetslaw/workingpapers/papernij-boerkeulen.pdf>, accessed on July 26, 2016.

¹²⁹ Art. 51i *WSv*.

¹³⁰ <http://wetten.overheid.nl/BWBR0033475/2013-06-01>, accessed on July 27, 2016.

¹³¹ van der Walt, *Expert Evidence*, p.2. (She describes that scientific knowledge expertise within criminal justice comprises “certain kinds of specialized, systematized knowledge not usually possessed by generalist judges, legally trained or lay assessors or by juries,” which includes physical sciences, social sciences, and technological sciences.)

¹³² Translated by van der Walt, *Ibid.*, pp. 66, 153.

¹³³ Conceptually, Dutch courts recognize no explicit role for experts in explaining the operative meaning within provisions of an Act, as Indonesian case law suggests.

¹³⁴ Art. 51k *WSv*.

¹³⁵ Art. 2 Register of Expert Decree.

¹³⁶ Art. 150.1 *WSv*. See also Nijboer, *et.all*, “Expert Registers,” p.4.

¹³⁷ Nijboer, *et.all*, *Ibid.*, pp. 19-20. (They emphasize issues on the expert registration concept, such as the inclusive field of experts and disagreement between scientific and experience experts. Assessment of competencies is another important consideration.)

¹³⁸ Register of Expert Decree, Art. 4.

independently.¹³⁹ The Board assesses determined substantive criteria of an expert. For example, to determine if an applicant is qualified as a DFE, the Board assesses if the applicant¹⁴⁰

- a. has sufficient knowledge and experience in the field of
 - 1) expertise to which the application relates;
 - 2) law concerned and is sufficiently familiar with the position and the role of the expert in this field;
- b. is able to
 - 1) inform the appointing party on the clarity of his question and to answer it professionally based on his specific expertise;
 - 2) collect, document, interpret, and assess investigative materials and data in a forensic context in accordance with the applicable standards;
 - 3) apply current investigative methods in a forensic context in accordance with the applicable standards;
 - 4) give, orally and in writing, a verifiable, well-reasoned, and well-documented report on the assignment and any other relevant aspect of his expertise in comprehensible terms to the appointing party;
 - 5) complete an assignment within the stipulated or agreed period;
 - 6) carry out his activities as an expert independently, impartially, conscientiously, competently, and in a trustworthy manner;
 - 7) prepare and carry out an investigation strategy in accordance with the applicable standards;

Moreover, the government publicly provides all relevant information of the experts on a website.¹⁴¹ Eight types of expertise are given,¹⁴² and some of them have been detailed into particular competences. For example, six specific competences are identified within the expertise of digital forensics, namely, computer, software, database, multimedia, device, and network.¹⁴³ The Board explicates each requirement in detail into its operational standard of qualifications. For instance, it explicates the meaning of “sufficient knowledge and experience in digital forensics” field into two requirements: basic requirements and specific requirements. The first emphasizes the coherence of combination between the experience and academic background,¹⁴⁴

¹³⁹ *Ibid.*, Art. 6.

¹⁴⁰ *Ibid.*, Art. 12.

¹⁴¹ www.nrgd.nl.

¹⁴² As of July 26, 2016.

¹⁴³ As of July 26, 2016, no digital forensic expert is registered in the database; the Board announced the Standard of Digital Forensics on February 18, 2016. By contrast, other experts are recorded in other fields, with 22 experts on DNA analysis and interpretation, 4 experts on handwriting examination, 163 experts on psychiatry for criminal law adults, 191 experts on psychology on criminal law adults, 40 experts on psychiatry on criminal law juveniles, and 8 experts on forensic pathology. <http://english.nrgd.nl/zoek-deskundige/zoeken/index.aspx>, accessed on July 26, 2016.

¹⁴⁴ Some basic requirements apply: The individual should have at least three years of relevant work experience at the level of an academic master’s degree *or* have at least five years of relevant work experience at the level of an academic bachelor’s degree; either option should *preferably* in the field of technical IT. In addition, the applicants should be familiar with the summary of concepts and keep abreast of state-of-the-art developments.

and the second underscores the sufficiency of the experience.¹⁴⁵ Furthermore, experts not only have to master their subject but also demonstrate sufficient knowledge in the field of law concerned.¹⁴⁶

VII. CONCLUSION AND RECOMMENDATION

A disparity in practice exists with regard to how Indonesian courts have interpreted and applied the rules and principles of the role of experts under the KUHAP in criminal cases, including cybercrime cases. Relevant issues include the scope, quality, and competence of an expert; the accessibility of an expert; equal access to evidential materials by the defendant's expert; and the impartial role of an expert in the criminal justice system. The open codification approach by setting the KUHAP as the general provisions of criminal procedure law and allowing many issues of the KUHAP to be expanded to various acts seems to be a contributing factor to such disparity. Drafts 2010 and 2013 of the KUHAP have left this issue unresolved. Thus, given that the amendment of the KUHAP is still under discussion, integrating the roles and principles of experts and elaborating them into a set of comprehensive principles and rules would be constructive for the Indonesian criminal justice system.

In the selected cybercrime cases, the central role of an expert was to provide opinions on operative meanings of related criminal provision elements, both legal and technical. To find the substantive truth, however, LEAs need to focus more on the examination of digital devices. Digital forensics, as a branch of science, is important in assisting agencies to seek the truth. Indonesian courts may need to require the implementation of digital forensic examinations in particular cases.

Moreover, the Dutch concepts of expert rules could be an important reference for the amendment of the KUHAP. The roles of the investigating judge in assessing the necessity of an expert in a case and determining the scope of the expert's investigation are important features to protect the impartiality of criminal justice system in finding the truth. The official expert database could serve as a mechanism to ensure the professionalism and competencies of experts in criminal cases.¹⁴⁷ Those features may answer a part of the problematic issues mentioned above. Still, consideration to adopt or transplant such features into Indonesian criminal justice should be based on a further thorough comparative research.¹⁴⁸

¹⁴⁵ They have to demonstrate that they have interpreted and reported a minimum of four cases in the preceding four years that have been subjected to collegial review and that they spent 40 hours a year over the past four years on forensically relevant professional development.

¹⁴⁶ For example, the Standard of Digital Forensics requires the expert to have sufficient knowledge on topics such as pre-trial investigation, coercive measures, stages of proceedings, and the position of the expert in the court procedure.

¹⁴⁷ <http://english.nrgd.nl/zoekdeskundige/waaromregister/>, accessed on July 26, 2016.

¹⁴⁸ For example, the Dutch investigating judge has a similar concept as that of the commissioner judge (*hakim komisaris* in RUU KUHAP 2010) or the preliminary investigating judge (*hakim pemeriksa pendahuluan* in RUU KUHAP 2013); those types of judges have the main responsibility to maintain the impartiality of the investigation. Their role could maintain and protect the equality of access to evidential material issue as in the *Mirna* case. Nevertheless, how the role of experts should be attached to the *hakim komisaris* or *hakim pemeriksa pendahuluan* requires further assessment.

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