E – Voting Election Implementation
In State Law

Marzuki*, Teddy Septiawan**, Novri Yanti***
* ** Master of Information Technology - Swiss German University
*** Master of Management - Muhammadiyah Tangerang University

Abstract - Electronic voting is seen as a tool to make the electoral process more efficient and to increase confidence in the organizers. Indonesia country that adopts democracy is required to hold elections free and fair and meet the principles of direct, general, free and secret. E-Voting information promised election results can be obtained quickly and real-time through the use of ICT in the delivery process and the vote count. Need for a strong national legal foundation for the implementation of E - Voting.

Index Terms : General Election, E – Voting, State Law

1. Introduction

The development of science and technology or known by today's science and technology coupled with the development of society and the international community, or more popularly, the term globalization has undoubtedly brought a very significant impact on the development of all countries in the world.

The impact in this case can certainly be a positive impact that will help human life and negatively highly detrimental to humans [Nuansa Aulia, Bandung, 2013].

Later Today more and more people are beginning to understand and make advantage to what is called information technology. Along with the progress of information technology has changed human life becomes easier because technology is always spoil a man with all its sophistication. Humans who have been in the running activities manually using human power now has turned to the use of technology.

Developments in information technology enters a new way of life known e-life, which is defined as the lives that have been affected by a variety of media-based electronics such as e-commerce, e-government, e-banking, e-library, e-education, etc.

The work completed with the use of this technology will be easier because it uses new and advanced media and high-tech. This technological advancement contains a lot of positive value to the user community due to the presence of information technology makes all the work to become more effective and efficient.

Improved information technology gave birth to the Internet as a phenomenon in human life that provide tremendous benefits for business development, exchange of information, science and technology.

Various information can be presented with the sophisticated and accessible both in terms of distance or close by using telecommunication technologies associated with computer media as a supporting device and the Internet as the core device. People assume that this world has no limits. So great and rapid development of this [Nilma Suryani, 2013].

The haste in issuing policies that affect the lives of many people, or more precisely Indonesian people, is the practice of decision-making frivolous.

Including haste in determining whether the nation would use a system of electronic voting (e-voting) in the Regional Head Election. In a democratic country and representatives of presidential elections is usually done by voting. Voting here is how to make choices by punching or check list choice.

Voting usually used in determining divulging options to get the results of an election process.

In the exercise of voting, will be full of fraud. Fraud usually occurs in the counting process (inflation outcome of the vote).

With frequent problem in the use of voting in the election process to make people's lack of confidence in the results of voting, both in the general election and the local elections.
Along with current technological developments, voting can be done electronically. Voting is done by the so-called information technology with electronic voting (e-voting).

Implementation of e-Voting is expected to overcome the problems that occur when using conventional systems (voting). In addition to overcoming the problems in the election, e-Voting is also able to save on the cost of implementation. In the use of e-Voting is no longer using ballots. The means used in the process of e-Voting is clicking or touching the screen (touch screen) to determine option [Made Leita Anistiawati, 2015].

A step forward has been taken by the Constitutional Court (MK) related to methods of regional head elections in Indonesia. The Court recently decided when the method of e-voting or touch screen can be implemented in the election-election in Indonesia. The Constitutional Assembly declared that Article 88 of Law No. 32 Year 2004 on Regional Government, constitutional conditional. That article actually states the election is done by voting. However, the Court found the meaning of 'voting' in this article is defined as of e-voting [http://www.hukum online.com].

This matter the government expressed his agreement if there are areas you want to use e-voting in election implementation, as long as the human resources and the community in the areas concerned are ready.

Implemented correctly, the e-voting can reduce some fraud plural occurs, accelerating the processing of the results, improve accessibility and make the election to be more convenient for the people-in some cases, when used in a series of elections, the possibility of reducing the cost of the election or referendum in the long term, If not planned and designed carefully, the introduction of e-voting could undermine confidence in the entire process of Election.

Therefore, it is important Application of E-Voting in elections to regional exist under national law in accordance with aspects E Voting implementation. The case studies similar to this case one of the forms of cybercrime is hacking (the perpetrators are called hackers). Hacking is the first form in this crime (first crime) as defined by the UN-X congress in Vienna in 2000. This is due to the form of this offense is something special, because it has the advantage of other forms of cybercrime.

Among them is that the perpetrators of these crimes are certainly able to do other cybercrime. Next technically the impact of hacking activity resulted in quality as a result of a more serious compared with other forms of cybercrime. To disseminate pornographic pictures or cyber pornography, people do not need the ability hacking, quite minimal internet capability [Agus Raharjo, Op. Cit, page 200].

Actions of various elements contained in Article 167 paragraph (1) and (2) Criminal Code, raised a variety of questions if it is associated with the act of hacking. The question is; whether the computer system of a person or an organization, or a website in a computer network (the Internet) can be categorized as an object under Article 167 Penal Code? Cybercrime today can be prosecuted by the Criminal Law that regulated the Criminal Code.

2. Research Problem

Based on the background research problem is how does Application of E-Voting In Election In State Law By Law No. 8 of 2015 concerning local elections?

3. Research Strategy

The research approach is a method or way researchers conduct research in order to obtain information on the various aspects of the issue sought to find the answer according to the type of research that is juridical - normative, the authors use the approach Regulations - law (Statute Approach) in this study. As is the approach of law - law (Statute Approach) is a study of the product - the product legal. This approach is employed by the author in order to examine the law - laws pertaining to focus on the problems studied, at the same time see the consistency of law - law.

4. The Concept of E – Voting

a. Internally, the electronic voting system has many functions, including encryption, randomization, communications, and security systems. Specific analysis on the functions is beyond the purpose of this sheet. For a basic understanding of the things that can be done by e-
voting systems, therefore, need to consider the following list of some of the functions that can be provided by the end of the system to voters and election officials.

b. Electronic voter list and voter authentication. Part of the electronic voting system could be electronic voters list, include one polling station or across the country. This list can be used to authenticate the eligible voters and noted that they had voted.

c. Screen for election workers. The special function is only available for workers voting, for example, which is recalculating the sound at the opening of polling stations, the closure of the election, the printing and delivery of results.

d. Screen for a given sound. It includes a touch screen, optical markers recognition (OMR) ballots inserted in the scanner, touch-sensitive tablet, buttons, web pages or software specifically for election voters via the Internet.

e. Special screen for voters with disabilities. Including, Braille or audio input device for the hearing impaired, easier access for voters with disabilities, and the screen is much simpler for illiterate voters.

f. Screen for the election results. For voting machine (see definition below) is not rare form of the printing press. However, some machines use only the digital display. When the polls closed, the screen can be used to display or print the results recorded by the voting machines. If the result is printed, then the printed sheet can be used as physical evidence of the results generated by the voting machine and copies can be distributed to the stakeholders who were present at the polling stations and can also be mounted for display in public places public.

g. Printing machine to print a proof of the voter can be verified for each vote (see trace data document voter verifiable audit / VVPAT below).

h. Results transmission system. Many voting machines that can transmit the results to the central counting system, for example via the Internet, telephone, cell phone or satellite connections. When there is no communication network, the result can be sent physically, using electronic storage media such as memory cards.

i. System tabulation of results, generally located in the center of the processing results. At the end of election day, they receive the results electronically from polling stations and automatically tabulates the results for a variety of contestants and the electorate.

j. System publication of results. Results beginning and end can be publicized through various means, including web pages, CD and geographic visualization system, and if needed, at every level up to the polls. The more detailed the results were published, the more transparent election.

k. Confirmation code system. Some e-voting solutions allow the control code that is intended to allow the verification of individuals at each vote by the voter concerned [Caarls, Susanne, 2010].

5. Data Analysis And Finding

The Prepare or ensure the socio-political environment that supports an important factor for the success implementation of e-voting. Sometimes, the electoral system is poorly designed or is not appropriate, can be successfully used for some time if the environment is broadly supportive. However, when the fundamental technical problems grow big, sooner or later, that problem would complicate the process. Therefore it is worth noting that confidence in e-voting system that deserve to be expected in the sense that the e-voting solution selected is built on a solid technical foundation. Some of the technical foundation has legal aspects, management of ICT projects, commercial aspects and time.

Referring to the case of the Jembrana test material to the Constitutional Court (MK). Testing refers to Law No. 32 of 2004 related holes and tick. Jembrana proposed to be use of information technology that is e-Voting. Submission of material testing it finally got the approval of the Constitutional Court (MK) provided that the application of e-Voting is based on the principles of direct, clean, honest and fair. Approval was also seen on the readiness of Jembrana regency will be five.
components, namely the readiness of the technology, funding, organization, human resources and legality. Filing judicial review conducted Jembrana actually done to organize the local elections. In this case, the decision of the Constitutional Court (MK) as a legal basis to conduct the local elections with no e-Voting. To carry out the local elections with e-Voting must be an underlying legislation. So that the local elections in Jembrana with e-Voting system cannot be realized. The protocol of the e-voting system proposed should be published. The protocol determines how a system to communicate and exchange data in a digital format with other systems. Within the framework of e-voting, the protocol was based on a set of electoral rules, which are defined by a set of code of laws about elections, about how an election process should implemented, i.e. how voters should choose, how the votes were transferred to the ballot, how the voice data should be calculated and displayed, and others [Hapsara, M, 2011]. The protocol is built on the system design phase. Enforcing transparency through Security by Design in this case means that the protocol of the e-voting system proposed should be published to be observed and judged by the public.

PKPU constitution no. 8 Year 2015 concerning Election, Research and Development of the Ministry of Home Affairs (MOHA) is conducting a study of the implementation of e-voting and e-recapitulation for the elections and already propose a revision to the House. So for now the legal basis for the implementation of E Voting Act is not strong, because there is no legislation governing the guidelines E Voting in detail.

6. Conclusion
The implementation of e-voting in Indonesia have to go through a very deep study of various aspects. As was required by the Court that in implementing e-voting should qualify cumulative five principles that do not violate the election: the overflow and fair and should be ready in terms of technology, finance, human resources, software, and people. To further the Ensure the successful implementation of e-voting requirements of the Constitutional Court should be augmented with the principles that have been issued by international institutions for the implementation of e-voting room fellow include eligibility and authentication, uniqueness, accuracy, integrity, supremacy and accountable , encryption, flexibility, cosy, verifiability, transparency, and cost-effectiveness. From a variety of Reviews These principles, the principle of cost-effectiveness should be a major concern if we want to realize democracy to the welfare of society

REFERENCES
[7] Peter Mahmud Marzuki, Penelitian Hukum (Cet. 6, Jakarta: Kencana, 2010), h. 93

AUTHORS
First Author – Marzuki, Swiss German Universitya, Email : kykie@engineer.com
Second Author – Teddy Septiawan, Swiss German University, Email : tseptiawan@gmail.com
Third Author – Novri Yanti, Muhammadiyah Tangerang University, Email : kiya2707@gmail.com
Correspondence Author – Marzuki. kykie@engineer.com, km4rzuki@gmail.com, +62817216599.