CONCEPTUAL AUDIT ECOSYSTEM FOR INDONESIA ELECTRONIC-BASED GOVERNMENT SYSTEM

by Hari Setia Budi Husni

Submission date: 05-Feb-2023 01:02AM (UTC-0500)
Submission ID: 2006496512
File name: 43-47_Husni.pdf (96.49K)
Word count: 2750
Character count: 16574

International Journal Science and Technology
IJST Vol 1 No. 3 NOV 2022 | P-ISSN: 2828-7045 E-ISSN: 2828-7045, Page 43-47

CONCEPTUAL AUDIT ECOSYSTEM FOR INDONESIA ELECTRONIC-BASED GOVERNMENT SYSTEM

Hari Setiabudi Husni
School of Information Systems, BINUS University
Email: hari.setiabudi@gmail.com

ABSTRACT

In the Presidential Regulation of the Republic of Indonesia Number 95 of 2018, the consideration section states that to realize clean, effective, transparent, and accountable governance and quality and reliable public services are required electronic-based government system (EBGS) and to improve the integration and efficiency of electronic-based government system is required governance and management of electronic-based government system nationally. EBGS general design has a variety of infrastructure and application needs to be used by central and local governments. This research was conducted to analyze the terms and needs of an ecosystem of electronic-based government system audits so as to achieve EBGS utilization integration and efficiency nationally. The research looks specifically at the implementation of audit process in the presidential regulation from the point of view of human resources, audit management and audits supporting infrastructure needed by the audit ecosystem to be able to run. The analysis will be conducted, among others, comparing the implementation stages by the government with the ideal design as stated within the literature, conducting interviews and disseminating questionnaires to audit ecosystem stakeholders (policy makers, policy supervisors, implementors activities and audit objects operators), the results of gap analysis between existing conditions and the ideal concept of ecosystem will be examined further to produce suggestions for improvement and development to ensure the formation of audit ecosystem mandated perpres 95/2018 is achieved.
Keywords: Presidential Executive Order No. 95/2018, Audit Ecosystem.

1. INTRODUCTION

The National Information and Communication Technology Council (WANTIKNAS) in 2018 published a report on the review of Digital Government Development. Based on its study, WANTIKNAS provides the following conclusions: (1) Digital Government as an effort to modernize public services through the adoption of digital technology, can provide opportunities for the government in serving the public and increase public participation and collaboration in creating services that are in accordance with the needs of the community (citizen-driven approach); (2) Indonesia already has e-Government regulation in the form of Presidential Regulation No. 95 of 2018 concerning Electronic Based Governance System (SPBE) which can be a reference in the development of SPBE for all government agencies and Digital Government in Indonesia; and (3) The Ministry of Communication and Informatics has issued Regulation of the Minister of Communication and Informatics No. 4 of 2016 on Information Security Management System (SMPI) which has adopted sni/ISO 270001:2013 standard and can be adopted in the application of Digital Government strategy to increase public trust.

Presidential Regulation number 95 of 2018 defines in article 1 paragraph 1 that electronic-based government system hereinafter abbreviated as SPBE is the administration that utilizes information and communication technology to provide services to SPBE Users. Article 1 paragraph 6 states that SPBE architecture is a basic framework that describes the integration of business processes, data and information, SPBE infrastructure, SPBE applications, and SPBE security to produce integrated, integrated SPBE services at the National, Central and Local Government levels.

One of the roles that can ensure the implementation of Presidential Regulation number 95 of 2018 is the implementation of information and communication technology audits periodically. The Presidential Regulation mentions the scope of regulations on SPBE is SPBE Governance, SPBE Management, Information and Communication Technology Audit (ICT), SPBE Organizers, SPBE Acceleration and SPBE Monitoring and Evaluation. ICT audit described in article 1 paragraph 25 is a systematic process to obtain and evaluate evidence objectively on information and communication technology assets with the aim of establishing the level of conformity between information and communication technology with established criteria and/or standards. Article 55 stated that Information and Communication Technology Audit consists of SPBE Infrastructure audit, SPBE Application audit and SPBE Security audit.

According to the Great Dictionary of The Indonesian Language, ecosystems/eco·sis·tem/ /ékosistem/ n 1 diversity of a community and its environment that serves as an ecological unit in nature; 2 organic communities consisting of plants and animals, along with their habitats; 3 special circumstances in which the community of a living organism and components of the organism do not live from an interacting environment (https://www.kbbi.web.id/ekosistem).

Information and Communication Technology Audit Ecosystem is a whole unity order among all elements of the environment that influence each other. Every component in an ecosystem has the structure, role and function that makes up a system. Between components one component interacts with each other and influences each other. Components of the Information and Communication Technology Audit ecosystem include policy makers (regulators) and regulators, policy implementers (operators), policy objects, quality guarantors, ki auditors (ArKI), makers of working reference standards.

Based on the above exposure, a systematic and structured review is needed to study and analyze issues related to the implementation of SPBE, especially in the information and communication technology audit process in accordance with Presidential Regulation number 95 of 2018. This research is proposed to carry out the study in 1 (one) fiscal year with the expected output of 5 (five) journal papers and conferences terindex scopus, enrichment of materials in the form of white paper, Intellectual Property Rights in the form of ecosystem schemes and research achievement reports.

2. DISCUSSION

The National Information and Communication Technology Council (WANTIKNAS) in 2018 published a report on the review of Digital Government Development. Based on its study, WANTIKNAS provides the following conclusions: (1) Digital Government as an effort to modernize public services through the adoption of digital technology, can provide opportunities for the government in serving the public and increase public participation and collaboration in creating services that are in accordance with the needs of the community (citizen-driven approach); (2) Indonesia already has e-Government regulation in the form of Presidential Regulation No. 95 of 2018 concerning Electronic Based Governance System (SPBE) which can be a reference in the development of SPBE for all government agencies and Digital Government in Indonesia; and (3) The Ministry of Communication and Informatics has issued Regulation of the Minister of Communication and Informatics No. 4 of 2016 on Information Security Management System (SMPI) which has adopted sni/ISO 270001:2013 standard and can be adopted in the application of Digital Government strategy to increase public trust.

Presidential Regulation number 95 of 2018 defines in article 1 paragraph 1 that electronic-based government system hereinafter abbreviated as SPBE is the administration that utilizes information and communication technology to provide services to SPBE Users. Article 1 paragraph 6 states that SPBE architecture is a basic framework that describes the integration of business processes, data and information, SPBE infrastructure, SPBE applications, and SPBE security to produce integrated, integrated SPBE services at the National, Central and Local Government levels.

One of the roles that can ensure the implementation of Presidential Regulation number 95 of 2018 is the implementation of information and communication technology audits periodically. The Presidential Regulation mentions the scope of regulations on SPBE is SPBE Governance, SPBE Management, Information and Communication Technology Audit (ICT), SPBE Organizers, SPBE Acceleration and SPBE Monitoring and Evaluation. ICT audit described in article 1 paragraph 25 is a systematic process to obtain and evaluate evidence objectively on information and communication technology assets with the aim of establishing the level of conformity between information and communication technology with established criteria and/or standards. Article 55 stated that Information and Communication Technology Audit consists of SPBE Infrastructure audit, SPBE Application audit and SPBE Security audit.

According to the Great Dictionary of The Indonesian Language, ecosystems/eco·sis·tem/ /ecosystem/ n 1 diversity of a community and its environment that serves as an ecological unit in nature; 2 organic communities consisting of plants and animals, along with their habitats; 3 special circumstances in which the community of a living organism and components of the organism do not live from an interacting environment (https://www.kbbi.web.id/ekosistem).

Information and Communication Technology Audit Ecosystem is a whole unity order among all elements of the environment that influence each other. Every component in an ecosystem has the structure, role and function that makes up a system. Between components one component interacts with each other and influences each other. Components of the Information and Communication Technology Audit ecosystem include policy makers (regulators) and regulators, policy implementers (operators), policy objects, quality guarantors, ki auditors (ArKI), makers of working reference standards.

Based on the above exposure, a systematic and structured review is needed to study and analyze issues related to the implementation of SPBE, especially in the information and communication technology audit process in accordance with Presidential Regulation number 95 of 2018. This research is proposed to carry out the study in 1 (one) fiscal year with the expected output of 5 (five) journal papers and conferences scopus Index, enrichment of materials in the form of white paper, Intellectual Property Rights in the form of ecosystem schemes and research achievement reports.

3. RESULT AND DISCUSSION

Today we are in the era of the fourth generation industrial revolution (4IR). In 4IR, new technologies have been found that are disruptive or disruptive technology. Technology is present so quickly and threatens the existence of incumbent companies. As an example of Uber threatening big players in the transportation industry, Airbnb is threatening big players in the tourism industry, Alibaba Group is threatening big players in the retail industry, and so on. One of the keys to success in 4IR is efficiency in internal services and processes. Just like private companies, the government is also encouraged to improve the efficiency of the process. This is the impact of 4IR, where there has been a very efficient and fast technological innovation in the community. Efficiency opportunities are very large to be applied by the Government, one of which is through the digitization of public administration and automation of business processes or known as Government 4.0. Other technological innovations have also begun to be applied in the preparation of government and democratic policies and regulations. In the midst of massive technological developments such as cloud computing, social media, mobile technology, providing opportunities for the government in serving the public and increasing public participation and collaboration in generating public services. This must be done by the government as an effort to modernize public services through the adoption of digital technology and integrate it in the public sector or so-called Digital Government (WANTIKNAS, 2018).

Presidential Regulation number 95 of 2018 concerning Electronic Based Governance System (SPBE) is a regulation under the Constitution of 1945 that provides legal basis for all processes run by the Government of the Unitary State of the Republic of Indonesia from the central agency to local government in achieving Digital Government. The goal to be achieved is to realize governance and public services that are clean, effective, efficient, accountable and reliable, then also to improve the efficiency and integration of electronic-based governance. The benefits to be achieved are increasing budget efficiency for the development of Electronic-Based Government, supporting the realization of Satu Data Indonesia through data sharing between Government agencies and local governments, encouraging the use of public sharing applications in Government and Local Government Agencies, increasing utilization of integrated ICT infrastructure and sharing for Government agencies and local governments, and finally the realization of government information security.

Presidential Regulation number 95 of 2018 further mentions elements of SPBE is, firstly SPBE Governance, is a framework to ensure the integration of SPBE architecture nationally with the function as a guideline in carrying out the integration of plans and budgets, integration of business processes, integration and sharing of data / information, integration and sharing of SPBE infrastructure, integration and sharing of SPBE applications, spbe security integration, and integration of SPBE services run. The second element is SPBE Management which is a series of processes to achieve efficient, effective and sustainable PBE implementation and quality SPBE services. SPBE management is carried out by each central and local government agencies. Serves as a guideline in managing SPBE through risk management, information security management, data management, information and communication technology (ICT) asset management, service management, knowledge management, change management, and information and communication technology audit.

Audit of information and communication technology in the regulation of the minister of administrative reform and bureaucratic reform of the Republic of Indonesia Number 59 of 2020 concerning monitoring and evaluation of electronic-based government systems are SPBE Application Audit, SPBE Infrastructure Audit and SPBE Security Audit. Referring to Presidential Regulation Number 95 of 2018, in the implementation of information and communication technology audit, appointed 2 (two) state institutions namely the Agency

for The Assessment and Application of Technology (BPPT) with the domain of application and infrastructure audit, while the State Cyber and Password Agency (BSSN) for the security domain SPBE.

In Presidential Regulation Number 95 of 2018, in detail explained related to the audit of SPBE Infrastructure consists of audit of National SPBE Infrastructure and infrastructure audit of Central And Local Government Agencies SPBE (IPPD). National SPBE Infrastructure Audit and IPPD SPBE Infrastructure Audit must be based on standards and procedures for implementing SPBE Infrastructure audits regulated by BPPT Regulations. SPBE Application Audit consists of General Application audit and Special Application audit. General Application Audit and Special Application must be based on standards and procedures for the implementation of SPBE Application audits regulated by BPPT Regulations. General Application Audit is conducted 1 (one) time in 1 (one) year by BPPT. While the special Application Audit is carried out at least 1 (one) time in 2 (two) years by the IPPD concerned. As in ippd infrastructure audit, in carrying out special application audit, IPPD is requested to coordinate with the Ministry of Communication and Information.

Meanwhile, SPBE security audit, according to presidential regulation 95/2018, consists of security audit of National SPBE Infrastructure, security audit of SPBE Infrastructure of Central and Local Government Agencies, General Application security audit and Special Application security audit. SPBE security audits are carried out based on the standards and procedures for implementing SPBE Security audits. National SPBE Infrastructure security audit and General Application security audit are conducted 1 (one) time in 1 (one) year by BSSN. Security audit of SPBE IPPD Infrastructure and Special Application security audit shall be conducted at least 1 (one) time in 2 (two) years by IPPD in carrying out security audit of SPBE IPPD Infrastructure and IPPD Special Application security audit in coordination with ministry of information related to monitoring, evaluating, and reporting security audit of SPBE IPPD Infrastructure and Special Application security audit. The provisions on the standards and procedures for the implementation of SPBE Security audit are regulated by BSSN Regulation.

4. CONCLUSION AND SUGGESTION

The conclusions for how to create audit ecosystems are:

1. Identify policies, regulations, roadmaps, which support the establishment of an ecosystem of information and communication technology audits in electronic-based government systems (SPBE).
2. Analyze the extent of existing policy achievements related to the SPBE, as well as what challenges and problems faced.
3. Formulate recommendations for strategic direction of information and communication technology audit ecosystem in electronic-based government system (SPBE).

The suggestions are:

1. Establish cooperation among audit stakeholders in Indonesia to realize sustainable SPBE.
2. Assisting information and communication technology audit stakeholders in Indonesia to actively participate in helping to realize sustainable SPBE.
3. Provide the concept of information and communication technology audit ecosystem that can be practically realized in accordance with the mandate of Presidential Regulation number 95 of 2018.

REFERENCES

[1] Dewan Teknologi Informasi dan Komunikasi Nasional. 2018. Policy Paper/Policy Brief Pengembangan Digital Government. Kementrian PPN/Bappenas. Jakarta.

[2] Peraturan Presiden Republik Indonesia. 2018. Nomor 95 Sistem Pemerintah Berbasis Electronik. Sekretariat Kabinet Republik Indonesia. Jakarta.

[3] Peraturan Menteri Komunikasi dan Informatika Republik Indonesia. 2016. Nomor 4 tentang Sistem Manajemen Pengamanan Informasi (SMPI). Sekretariat Kementrian Komunikasi dan Informatika. Jakarta.

[4] Peraturan Menteri Dalam Negeri Republik Indonesia. 2019. Nomor 72 tentang perubahan atas peraturan menteri dalam negeri Nomor 137 tahun 2017 tentang kode dan data wilayah Administrasi pemerintahan. Sekretariat Kementrian Dalam Negeri. Jakarta.

[5] Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Republik Indonesia. 2020. Nomor 59 tentang pemantauan dan evaluasi sistem pemerintahan berbasis elektronik. Sekretariat Kementrian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi, Jakarta.

CONCEPTUAL AUDIT ECOSYSTEM FOR INDONESIA ELECTRONIC-BASED GOVERNMENT SYSTEM

GRADEMARK REPORT

FINAL GRADE

/0

GENERAL COMMENTS

Instructor

PAGE 1

PAGE 2

PAGE 3

PAGE 4

PAGE 5