

ENSURING CONSTRUCTION WORKERS LEGAL PROTECTION: A LEGAL ANALYSIS OF CONSTRUCTION COMPETENCY CERTIFICATES UNDER THE LAW ON PERSONAL DATA PROTECTION AND BLOCKCHAIN FRAMEWORKS

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Abstract

National development towards Indonesia 2045 is massively carried out, based on the Coordinating Minister for Economic Affairs Regulation Number 21 of 2022 that Indonesia has 210 development projects and 12 programs, in December 2022 a total of 152 projects have been implemented and are fully operational. Realizing national development, Construction Service Business Entities require Construction Workers to certify so that the quality and qualifications of the workforce can be recognized and professional accountability is formally clear. However, the security of the professional certificate of construction services is not guaranteed. The research uses normative juridical methods by examining all regulations related to the issues discussed. Determining the qualifications of construction service business entities that are assessed, one of which is the availability of construction labor. The procedures and flow of procedures for implementing construction work competency certificates are regulated in the Regulation of the Minister of Public Works and Public Housing Number 8 of 2022 concerning Procedures for Implementing the Fulfillment of Construction Service Standard Certificates in order to support the ease of business licensing for construction service business actors. Repressive efforts in cybercrime are guaranteed by Law No. 27 of 2022 on Personal Data Protection. To prevent cybercrime in the LPJK data storage system, it can cooperate with the Ministry of Communication and Information Technology regarding the policy of using Blockchain.



Keywords: Personal Data, Construction Services, LPJK, Certificate, Manpower

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INTRODUCTION

The National Development Mandate was confirmed in the Preamble to the 1945 Constitution, Fourth Paragraph. The goal of national development is to create a just and prosperous society based on Pancasila and the 1945 Constitution of the Republic of Indonesia. In realizing equitable development that is just, this is accomplished by accelerating regional development in Indonesia and granting community members equitable access to a range of social services, facilities, and economic infrastructure.

Unequal development requires efforts to encourage deconcentration of investment through various efforts such as incentives for investment in underdeveloped areas, controlling industrial relocation and migration, and integrated regional development.¹ According to the Ministry of Manpower's planned strategy, the Industrial Revolution 4.0 with increasingly intelligent technology encourages increased workforce competency in order to meet the link and match needs of the job market. ² List of National Strategic Projects based on Coordinating Minister for Economic Affairs Regulation Number 21 of 2022 concerning Amendments to Regulation of the Coordinating Minister for Economic Affairs Number 9 of 2022 concerning Amendments to the List of National Strategic Projects, the total number of National Strategic Projects is 210 projects with 12 programs, from 2016 to December 2022, of the 210 projects, 152 projects have been completed and are fully operational.³

Article 3 of Presidential Regulation Number 120 of 2022 concerning Special Assignments in the Context of Accelerating the Implementation of Infrastructure Development, the Ministry of Public Works and Public Housing is working together through the Government Cooperation scheme with Business Entities to accelerate the implementation of infrastructure development. A contract between the government and the private sector governs this private sector participation, which serves as an alternative

¹ Hastu Prabatmodjo dan Michael Micklin, "Industrialisasi dan Urbanisasi di Asia Tenggara," *Journal of Regional and City Planning* 2, no. 1 (1991): 32.

² Stevanus Agung Wibowo, Sinta Ningrum, dan Tomi Setiawan, "Evaluasi Pelatihan Vokasi Kementerian Ketenagakerjaan Selama Periode Pandemi Covid-19 (2021)," *Jurnal Administrasi Negara* 14, no. 2 (2023): 642.

³ Kristantyo Wisnubroto, "Capaian Pembangunan Infrastruktur Strategis," Artikel, *Portal Informasi Indonesia* (blog), 8 Januari 2023, https://indonesia.go.id/kategori/editorial/6792/capaian-pembangunan-infrastruktur-strategis?lang=1.

source of funding for the provision of public service facilities.⁴ Through Presidential Regulation Number 38 of 2015 concerning Government Cooperation with Business Entities, Business Entities will obtain capital costs, operational costs and profits from the Managing Business Entity as a form of return on private investment.

The contribution of capital from the private sector means that the state's position is no longer dominant in carrying out control and protection against business entities that touch the public domain.⁵ Therefore, the limits on ownership of shares in State-Owned Enterprises in strategic sectors and controlling people's livelihoods are not controlled by foreign investors, in order to maintain the sustainability of national interests and community welfare.⁶ Demonopolization is an effort to encourage the private sector to become business competitors for State-Owned Enterprises, in order to increase the performance of companies that compete fairly and improve services to the public so as to create a perfectly competitive market.⁷

Based on the list of National Strategic Projects for 2022, massive infrastructure development was carried out covering all regions of Indonesia during the era of President Joko Widodo's administration. The presence of Law Number 2 of 2017 concerning Construction Services supports the realization of national development goals which play a role in supporting various development fields. The Construction Services Law governs a number of them, including: establishing a system for construction services that can ensure public safety and comfort in the built environment; ensuring good governance for the provision of construction services; and providing construction services with the goal of developing a strong, dependable, highly competitive business structure and quality construction service results. In construction activities, things need to be paid attention to in relation to quality issues, including: construction materials, equipment, as well as training and certification of construction personnel.⁸

Contractors as the main actors in carrying out construction work follow the technical and specifications of the task provider, subcontractor services as suppliers who carry out some work that is different from the main contractor's work, suppliers as suppliers of materials and equipment, and foremen as suppliers of skilled or non-skilled labor for

⁴ Kementerian Pekerjaan Umum dan Perumahan Rakyat, "Tentang KPBU," *simpulKPBU* (blog), t.t., http://simpulkpbu.pu.go.id/ppp/re/tentang-kpbu.

⁵ Josefhin Mareta, "Prinsip Konstitusi Ekonomi dalam Privatisasi Badan Usaha Milik Negara," *Jurnal Konstitusi* 15, no. 1 (29 Maret 2018): 121, https://doi.org/10.31078/jk1516.

⁶ Mareta, 132.

⁷ Putu Samawati Saleh, "Demonopolisasi PT. KAI (PERSERO) dan PT. PELINDO (PERSERO) Penguatan Sistem Ekonomi Demokrasi," *Mimbar Hukum - Fakultas Hukum Universitas Gadjah Mada* 31, no. 3 (29 Januari 2020): 313, https://doi.org/10.22146/jmh.43140.

⁸ Asep Subrata, Mas Halimah, dan Mohammad Benny Alexandri, "Pengaruh Implementasi Kebijakan Nilai Penawaran di Bawah 80 % Terhadap Kualitas Pekerjaan Konstruksi Di Kabupaten Bandung," *Responsive* 3, no. 3 (10 Juli 2021): 165, https://doi.org/10.24198/responsive.v3i3.31859.

implementation project.⁹ Subcontractors, suppliers and also foremen are a group of human resources who carry out quality project construction and fulfill the wishes set by customers until customer satisfaction is achieved.¹⁰

Having certified construction workers is a necessity for construction service companies. The Job Skills Certificate is also a strict requirement from the Ministry of Manpower, as well as a condition when the company applies for an extension of the Business Entity Certificate. When processing the extension of the validity period of the Business Entity Certificate, the company must attach data on the Technical and Classification Responsible Person, the condition of which is that they must have a Work Skills Certificate. If the classification of a Building Business Entity Certificate is being processed, then a Building Expert Work Skills Certificate must be available. However, now there is a problem in arranging the Business Entity Certificate, namely that the expert staff holding the Job Skills Certificate of the company where they work are taken away by other irresponsible business entities.

On this basis, the author wants to know more about, How are the licensing arrangements for Business Entity Certificates and Work Skills Certificates in Indonesia? and How are job skills certificates protected under the Personal Data Protection Law?

RESEARCH METHODS

Applying the legal approach method, which entails going over all the regulations connected to the topic of discussion.¹¹ Primary legal materials in the form of laws and regulations are among the types of data used as secondary data; these are backed up by secondary legal materials in the form of book references, journal articles, and other sources. The type of data used in the form of secondary data includes primary legal materials in the form of laws and regulations, which are supported by secondary legal materials in the form of book references, journal articles and other sources. In connection with the type of research used is normative, the legislative approach in this case is Law Number 2 of 2017 concerning Construction Services, Law Number 25 of 2009 concerning Public Services, Law Number 27 of 2022 concerning Protection of Personal Data , Regulation of the Minister of Public Works and Public Housing Number 8 of 2022 concerning Procedures for Implementing the Fulfillment of Standard Certificates for Construction Services Business Actors to investigate the protection of construction services professional certificates.

⁹ Krishna S. Pribadi, Ima Fatima, dan Dewi Yustiarini, "Identifikasi Rantai-Pasok dalam Industri Konstruksi Indonesia untuk Pengembangan Sistem Penjaminan Mutu," *Jurnal Teknik Sipil* 14, no. 4 (1 Desember 2010): 174, https://doi.org/10.5614/jts.2007.14.4.1.

¹⁰ Pribadi, Fatima, dan Yustiarini, 178.

¹¹ Amiruddin dan Zainal Asikin, *Pengantar Metode Penelitian Hukum* (Jakarta: Raja Grafindo persada, 2012), 163–64.

RESULT AND DISCUSSION

Arrangement Of Work Competency Certificates In Construction Services Business Licensing In Indonesia

The end product of construction is a structure or building that is integrated into the surrounding land.¹² There are 3 main areas of work in construction activities, including; building construction; civil building construction includes industrial facilities, infrastructure projects and public facilities, building and irrigation systems, pipelines and electricity networks, and sports facilities; as well as special construction activities related to special skills such as making buildings function such as plumbing, heating, air conditioning, alarm systems and other electrical work, watering systems, elevators and others.¹³

In order to ensure public safety and ensure the governance of construction services, construction companies as construction service providers are required to have a Business Entity Certificate. Article 1 number 11 of the Construction Services Law. Business Entity Certificate as proof of recognition of the ability of the classification and qualifications of the business entity as well as equalizing capabilities with foreign construction service business entities. Determining the qualifications of small, medium and large business entities in construction work is assessed from annual sales, financial capabilities, availability of construction labor, and ability to provide construction equipment. The special pattern of the supply chain network is a strategy for procuring materials and services by the project owner for efficient construction financing.¹⁴

Article 70 paragraph (1) of the Construction Services Law, "Setiap tenaga kerja konstruksi yang bekerja di bidang Jasa Konstruksi wajib memiliki Sertifikat Kompetensi Kerja." The Construction Services Law emphasizes that every construction worker is required to have a work competency certificate to guarantee the quality and responsibility of construction service workers.

Article 99 of Government Regulation Number 5 of 2021 concerning the Implementation of Risk-Based Business Licensing confirms that the standard certificate for business licensing in the construction services subsector includes: Construction Business Entity Certificate, Construction Work Competency Certificate, and license. Article 1 number 15 Regulation of the Minister of Public Works and Public Housing Number 8 of 2022 concerning Procedures for Implementing the Fulfillment of Standard Certificates for Construction Services in the Context of Supporting Ease of Business Licensing for Construction Services Business Actors explains that Construction Workers

¹² Muhlis dan Mei Lianawati Windiasari, *Statistik Konstruksi 2021* (Badan Pusat Statistik, 2021), 4.

¹³ Muhlis dan Mei Lianawati Windiasari, "Statistik Konstruksi 2021" (Badan Pusat Statistik, 2021), 5–6.

¹⁴ Reini D. Wirahadikusumah dan Susilawati Susilawati, "Pola Supply Chain pada Proyek Konstruksi Bangunan Gedung," *Jurnal Teknik Sipil* 13, no. 3 (1 September 2010): 120, https://doi.org/10.5614/jts.2006.13.3.1.

are anyone who is proven by a Construction Work Competency Certificate to have skills/knowledge and experience in carrying out construction work.

Workforce qualifications are needed to support the workings of the production system, especially in relation to the machines/equipment they are responsible for. The level of formal education of the workforce does have an influence, but technical/practical knowledge and skills based on experience are more important in determining workforce ranking.¹⁵ The absorption of labor in the industrial sector on the island of Java tends to be capital intensive, giving rise to tighter selection of skilled workers.¹⁶

Certification for Construction Workers is an important factor because the knowledge and skills obtained in the certification program can be applied directly in the field, so that projects are completed on time and a quality workforce is created.¹⁷ The Construction Services Law affirms that wages for construction workers with a Work Skills Certificate are entitled to fair compensation for the services rendered. To ensure wages are guaranteed, construction workers must also be professionally responsible for the results of their work, which can be implemented through a guarantee mechanism.

One of the requirements for determining the qualifications of a Construction Services Business Entity is the availability of Construction Workers consisting of: number of workers, qualifications of workers and levels of workers. This is based on Article 88 of Government Regulation Number 5 of 2021, proven by the ownership of a Work Competency Certificate for each sub classification. There are fifty-one sub classifications of Construction Labor originating from, including architectural classification; civil; mechanic; environmental governance; implementation management; landscape architecture, illumination, and interior design; urban and regional planning; and engineering science and engineering.¹⁸

The rules for certification of construction workers are regulated in Regulation of the Minister of Public Works and Public Housing Number 8 of 2022 Articles 21 to Article 35. The following is the flow of procedures for implementing a construction work competency certificate:¹⁹

¹⁹ Lampiran Peraturan Menteri Pekerjaan Umum Dan Perumahan Rakyat Republik Indonesia Nomor 08 Tahun 2022 Tentang Tata Cara Pelaksanaan Pemenuhan Sertifikat Standar Jasa Konstruksi Dalam Rangka Mendukung Kemudahan Perizinan Berusaha Bagi Pelaku Usaha Jasa Konstruksi, 106–9.

¹⁵ Taufik Rochim, "Kualitas Tenaga Kerja Yang Diperlukan Guna Menunjang Sistem-Produksi (Industri Pemesinan) Modern," *Mesin Institut Teknologi Bandung* 5, no. 1 & 2 (1986): 31.

¹⁶ Binsar Naipospos, "Memanfaatkan Dampak Globalisasi," *Journal of Regional and City Planning* 2, no. 1 (1991): 56.

¹⁷ Kadek Nita Puri Rahayu dan Agus Fredy Maradona, "Sertifikasi konstruksi tenaga kerja: antara mengikuti peraturan pemerintah dan membangun kompetensi bisnis," *K I N E R J A*, 2020, 49.

¹⁸ Lampiran Peraturan Menteri Pekerjaan Umum Dan Perumahan Rakyat Republik Indonesia Nomor 08 Tahun 2022 Tentang Tata Cara Pelaksanaan Pemenuhan Sertifikat Standar Jasa Konstruksi Dalam Rangka Mendukung Kemudahan Perizinan Berusaha Bagi Pelaku Usaha Jasa Konstruksi, t.t., 51– 60.

- 1) Create an account on the Public Works and Public Housing Licensing Portal then Login with User ID and Password;
- 2) Construction Workers select the application type: new/extension/change of data, while selecting the Professional Certification Institution on the Licensing Portal;
- 3) Construction workers fill in the data and documents required for the Construction Work Competency Certificate application on the Portal and then forward it to the Professional Certification Institute Information System;
- 4) The Professional Certification Institute admin checks the data and documents, if it is not complete, the Professional Certification Institute admin will notify the applicant to complete the data and documents;
- 5) The Professional Certification Institution issues a fee bill, after the Applicant makes a payment transaction, the Applicant uploads proof of payment on the Portal;
- 6) The Professional Certification Agency confirms the payment, if not then the process cannot continue;
- The Professional Certification Institute arranges for the competency test or assessment to be administered after payment has been verified. The Professional Certification Institute administrator then enters the assessment schedule plan into the Construction Services Development Institute System;
- 8) The Professional Certification Institute assigns competency assessors to carry out the assessment, the Professional Certification Institute admin fills in the assessor assignment data in the Construction Services Development Institute System;
- 9) Assessors carry out assessments of Construction Workers;
- 10) After completing the assessment, the assessor submits the assessor's recommendations as stated in the Minutes of Competency Test Results to the Professional Certification Institute;
- 11) The Professional Certification Institute determines the results of the Construction Worker assessment based on the Minutes of Competency Test Results;
- 12) If the result is that the Construction Workers are not yet competent then the process of Application for a Work Competency Certificate is stopped/failed;
- 13) If the results of the assessment state that Construction Workers are competent, the Professional Certification Agency submits plans for issuing work competency certificates to the National Professional Certification Agency to determine the work competency certificate number and registration number for the National Professional Certification Agency;
- 14) The Professional Certification Institute submits the work competency certificate number and registration number of the National Professional Certification

Agency to the Construction Services Development Institute to be given a work competency certificate registration number;

- 15) LPJK submits the work competency certificate registration number to the Professional Certification Institute;
- 16) The Professional Certification Institute issues a Work Competency Certificate and forward it to the Public Works and Public Housing Licensing Portal. The Applicant can download the Work Competency Certificate on the Licensing Portal.

Construction specialists who fulfil the requirements based on specific scientific disciplines and expertise are awarded a Work Skills Certificate. In the meantime, skilled construction workers who meet the requirements based on scientific discipline and knowledge are awarded the Work Skills Certificate. Job Skills Certificate identification is a technical/department leader in a construction project which is divided into basic, middle and junior categories: Job Skills Certificate is proof of skills that determine as a technology leader in the categories of primary class, middle class and level 3.²⁰ The Job Skills Certificate and Job Skills Certificate are issued by the Construction Services Development Institute. Applications for Skills and Work Skills Certificates regulated in Article 8 both have the same attached documents, namely a legalized photocopy of the diploma, a list of work experience, a photocopy of the Resident Identity Card, a letter stating the validity of the document, and a Self-assessment carried out through the National "SIKI-LPJK". Work Skills Certificates are regulated by the National Construction Services Development Institute Regulation Number 5 of 2017 concerning Certification and Registration of Experts. Work Skills Certificates have additional attachments, namely a photocopy of the Taxpayer Identification Number card.

Labor productivity is influenced by several factors, namely: work skills proven by work experience references, training certification or competency certification; psychological conditions of workers, and work motivation with certain policies and work safety benefits; good and efficient work methods; management of work facilities and infrastructure; and work environment conditions.²¹ Construction Labor is one of the foundations for realizing the goals of construction service work. Construction Service Business Entities are required to employ certified Construction Labor. Work Competency Certification is proof of recognition of construction workers after passing competency tests in accordance with national, international and/or special standards.

²⁰ Suyahman, "Inilah Perbedaan SKA, SKT dan SKK Konstruksi," Regulasi, *SAH! Sumber Artikel Hukum* (blog), 14 September 2022, https://sah.co.id/blog/inilah-perbedaan-ska-skt-dan-skk-konstruksi/.

²¹ Irfa Kodri, Heni Fitriani, dan Ika Juliantina, "Analisis Pengaruh Pelatihan dan Sertifikasi terhadap Produktivitas Pekerja," *MEDIA KOMUNIKASI TEKNIK SIPIL* 24, no. 1 (24 Agustus 2018): 11, https://doi.org/10.14710/mkts.v24i1.17331.

Protection For Workers Regarding Construction Services Workforce Certificates By Construction Services Development Agency

Labor certificates, including work competency certificates, work skills certificates and work skills certificates, are personal data of Indonesian citizens who have the right to have their identities protected in fulfilling their obligations in different countries by serving the profession they are currently carrying out. The implementation of all arrangements in various fields must uphold human rights because Indonesia is a legal state that is legally regulated by the constitution. Apart from that, the characteristic of popular sovereignty (democracy) is the guarantee of the rights and obligations of citizens.

Regulation of the Minister of Public Works and Public Housing of the Republic of Indonesia Number 9 of 2020 concerning the Establishment of Construction Services Development Institutions, Article 5 emphasizes that Construction Services Development Institutions are non-structural institutions that are under and responsible to the Minister. Article 7, the task of the Construction Services Development Institute is to carry out registration, accreditation, determine expert appraisers, establish a Professional Certification Institute, grant licenses, and participate in the construction services sector. The Construction Services Development Institute carries out various functions, including the processing of labor certificates. Individual construction services businesses must have a Work Skills Certificate registered by the Construction Services Development Institute as evidenced by the possession of an Individual Business Registration Certificate, as per Article 7 paragraph (1) of Regulation of the Construction Services Development Institute Number 3 of 2017 concerning Certification and Registration of Construction Services Businesses.

The Construction Services Development Institute is an institution established to carry out part of the authority of the Central Government, becoming a special public service institution in the field of construction services. Public services are all forms of services, both in the form of public goods and public services which are in principle the responsibility and implemented by government agencies at the center, in the regions, and within the State-Owned Enterprises or Regional-Owned Enterprises, in the context of efforts to fulfill community needs and implementation of statutory regulations.²² The state has a duty to provide high-quality public services that satisfy citizens' fundamental needs and civil rights in order to achieve overall prosperity.²³

Article 21 of Law Number 25 of 2009 concerning Public Services, one of the components of public service standards is guaranteeing the security and safety of services in the form of a commitment to provide a sense of security, freedom from danger and risk of doubt. Taking the identity of workers by irresponsible business entities/other people is a form of crime.

²² Nuriyanto Nuriyanto, "Penyelenggaraan Pelayanan Publik Di Indonesia, Sudahkah Berlandaskan Konsep 'Welfare State'?," *Jurnal Konstitusi* 11, no. 3 (20 Mei 2016): 433, https://doi.org/10.31078/jk1132.

²³ Nuriyanto Nuriyanto, "Penyelenggaraan Pelayanan Publik di Indonesia, Sudahkah Berlandaskan Konsep 'Welfare State'?," *Jurnal Konstitusi* 11, no. 3 (2016): 437, https://doi.org/10.31078/jk1132.

Protection Based On Law Number 27 Of 2022 Personal Data Protection

Public interactions using information communication technology are highly dependent on the availability, integrity and confidentiality of information in cyber space.²⁴ Singapore has had a Personal Data Protection Act since 2012 adopting the rules contained in the European Data Protective Directive, while Malaysia has The Personal Data Protection Act Number 709 of 2010, Malaysia also regulates in the Personal Data Protection Act not to allow the transfer of personal data outside Malaysia, unless permission has been obtained from the relevant ministry and the country or place where personal data is transferred can provide a guarantee of personal data protection equivalent to the Personal Data Protection Act.²⁵

According to the General Data Protection Regulation by the European Union Legislative Body, personal data is any information related to an individual or "data subject" that can be used to directly or indirectly identify a person.²⁶ The legal scope of personal data protection is very broad, starting from the types, principles, rights and obligations of the subject, obligations of the data controller and data processor, data transmission across borders of other countries, sovereignty, data protection officers, data protection authorities, and how to resolve disputes and sanctions for violators of the law.²⁷

Law Number 27 of 2022 concerning Personal Data Protection was promulgated on October 17, 2022, to protect individual rights related to the processing of personal data carried out with data processing devices, both electronic and non-electronic. Types of personal data according to Law Number 27 of 2022, are divided into two, namely specific and general, specific personal data includes: crime information data, genetic data, crime records, children's data, personal financial data, and other data in accordance with the provisions of statutory regulations. Meanwhile, general data includes: full name, gender, nationality, religion, marital status and personal data which are combined to identify a person. Labor certificates, including Work Competency Certificates, Work Skills Certificates, and Work Skills Certificates, are certificates that contain general and specific data related to specific information that provides formal proof that a person has competence in a particular field. A labor certificate guarantees the credibility of the workforce to carry out a job according to their competence and responsibilities.

Article 37 of the Law on Personal Data Protection states that personal data controllers are obliged to supervise the processing of personal data under the personal data controller for each party involved. Negligence in monitoring personal data so that other business

²⁴ Hezkiel Bram Setiawan dan Fatma Ulfatun Najicha, "Perlindungan Data Pribadi Warga Negara Indonesia Terkait Dengan Kebocoran Data," *Jurnal Kewarganegaraan* 6, no. 1 (2022): 979.

²⁵ Nadiah Tsamara, "Perbandingan Aturan Perlindungan Privasi Atas Data Pribadi Antara Indonesia Dengan Beberapa Negara," *Jurnal Suara Hukum* 3, no. 1 (9 Maret 2021): 84, https://doi.org/10.26740/jsh.v3n1.p53-84.

²⁶ Ananthia Ayu, Titis Anindyajati, dan Abdul Ghoffar, "Perlindungan Hak Privasi atas Data Diri di Era Ekonomi Digital" (KEPANITERAAN DAN SEKRETARIAT JENDERAL MAHKAMAH KONSTITUSI, 2019), 79, Mahkamah Konstitusi.

²⁷ Muhammad Fikri dan Shelvi Rusdiana, "Ruang Lingkup Perlindungan Data Pribadi: Kajian Hukum Posistif Indonesia," *Ganesha Law Review* 5, no. 1 (2023): 47.

entities take labor certificates is an unlawful act. Article 65 paragraph 3 "*Setiap Orang dilarang secara melawan hukum menggunakan Data Pribadi yang bukan miliknya.*" The criminal provisions regulated for the act of using personal data that does not belong to you are imprisonment for a maximum of 5 years and/or a fine of a maximum of 5 billion rupiah. Repressive efforts against business entities which are also the subject of the Law on Personal Data Protection when they violate this Law will be subject to a fine of up to 10 times the maximum fine threatened.

Article 70 of the Law Concerning Personal Data Protection, in addition to fines, corporations can impose additional penalties, including: confiscation of earnings and/or assets obtained through illegal activity; freezing all or a portion of the business; a permanent ban on specific activities; closing all or a portion of the business premises; fulfilling unfulfilled obligations; paying compensation; revocation of licences; and/or dissolution of the corporation. The Law on Personal Data Protection provides a guarantee of legal certainty due to the increasingly massive development of information technology, the ease with which someone can collect and transfer personal data from one party to another poses a threat to the constitutional rights of personal data subjects.

Cybercrime law enforcement must also pay attention to international conventions and cybercrime law enforcement arrangements in other countries to create synchronization in law enforcement applications. Based on the General Data Protection Regulation, lawfulness, fairness, and transparency; purpose limitation; data minimization; accuracy; storage limitations; integrity and confidentiality; and accountability are the seven principles for protecting personal data, namely the principle that companies must be responsible for every action taken on users' personal data and how the company complies with other principles.²⁸

Construction Services Development Institutions that provide public services related to construction services professional certification must provide security guarantees for construction service labor certificates in accordance with public service standard procedures. Article 23 of the Public Service Law requires that public service providers in managing electronic or non-electronic information systems, one of which is to have complaint management as a place for the complaint handling process starting from the selection, review and classification stages until there is certainty of complaint resolution. The Construction Services Development Institute as an institution that is responsible to the Ministry of Public Works and Public Housing has a complaint management service via the website https://lpjk.pu.go.id "Lapor BAPAK!". To make a complaint, you need to register by entering personal data, including: full name, email, telephone number, last name and password.²⁹

²⁸ Muhammad Fikri dan Shelvi Rusdiana, "Ruang Lingkup Perlindungan Data Pribadi: Kajian Hukum Positif Indonesia," *Ganesha Law Review* 5, no. 1 (2023).

²⁹ Lembaga Pengembangan Jasa Konstruksi dan Kementerian Pekerjaan Umum dan Perumahan Rakyat, "Lapor Bapak!," Pengaduan, *Lapor Bapak* (blog), t.t., https://lpjk.pu.go.id/lapor-bapak/.

Protection Based On Blockchain Technology

Globalization has a strong impact on development in Indonesia, land prices, facility construction costs and cheap labor will be anticipated by foreign investors as assets to develop industry in Indonesia.³⁰ When used as a communication and information tool, the internet offers a multitude of services and goods. Digital files consisting of names, e-mails and cell phone numbers are owned by most, if not almost all, people by utilizing internet technology developed by private parties, which carries a very high risk of violating someone's right to privacy over personal data.³¹ A person's right to privacy is violated if their personal information is publicly accessible or visible and pertains to their "private life.".³²

Administrative or criminal penalties must be applied to those responsible for protecting personal data. Court litigation or non-litigation may be used to resolve cases involving the leakage of personal data.³³ As citizens, no one should be subject to personal exposure unless they choose to, so they need protection from the government.³⁴ The General Data Protection Regulation as a global data privacy standard, has tensions with blockchain regarding whether this technology should be excluded from the legal framework, this has a huge impact on the early stages of a technology's development, as technology is more adaptable to regulatory requirements than mature technology.³⁵

Data on the blockchain is safer to store than it is on the cloud because encryption is applied to the data before it is connected to the blockchain, turning it into random code. The code will be distributed among blockchain nodes after it has been encrypted. Because all nodes in the blockchain are connected to one another and communicate with one

³² Joel R. Reidenberg, "Data protection in the private sector in the United States," *International Review of Law, Computers & Technology* 7, no. 1 (12 Mei 2010): 34, https://doi.org/10.1080/13600869.1993.9966350.

³³ Hezkiel Bram Setiawan dan Fatma Ulfatun Najicha, "Perlindungan Data Pribadi Warga Negara Indonesia Terkait dengan Kebocoran Data," *Jurnal Kewarganegaraan* 6, no. 1 (2022).

³⁴ Kevin M. Takakuwa, "A physician's (and private citizen's) Right to Privacy Against Internet Data Brokers: Maintaining Safety in an Unsafe Profession," *The American Journal of Emergency Medicine* 37, no. 10 (Oktober 2019): 1968.

³⁰ Binsar Naipospos, "Memanfaatkan Dampak Globalisasi," *Journal of Regional and City Planning* 2, no. 1 (1991): 52–61.

³¹ Nadiah Tsamara, "Perbandingan Aturan Perlindungan Privasi Atas Data Pribadi antara Indonesia dengan Beberapa Negara," *Jurnal Suara Hukum* 3, no. 1 (2021): 53, https://doi.org/10.26740/jsh.v3n1.p53-84.

³⁵ Michèle Finck, "Blockchain Regulation and Governance in Europe || Blockchains, Law and Technological Innovation," *Cambridge University Press*, 7 Desember 2018, 151, https://doi.org/10.1017/9781108609708.006.

another, all nodes will hold identical copies of the data, meaning that nothing will be different. As a result, information on the blockchain cannot be altered.³⁶

The issue of data security is solved by blockchain technology since data entered into the blockchain is encrypted into random code and is never again the same. Everyone can see every user transaction or data exchange, but only the involved user can view the contents of the exchange.³⁷ The blockchain supports transparent data on public blockchains, but enables access control for private blockchains. People can still infer information with anonymous, undesirable data and the information is transparent on the public blockchain. Additionally, if someone knows someone else's public key, then he can know all his transactions. However, access to data that can provide information can be limited by the data owner.³⁸

While public blockchains, which have very low transaction processing rates, also put information privacy at risk by their very nature, private blockchains, which have very high transaction processing rates and few authorised participants, take less time to reach network consensus.³⁹ A blockchain system ensures that all nodes ultimately reach consensus regarding the integrity and shared content of the blockchain ledger.⁴⁰

Preventive efforts can be made to prevent violations of the personal data of the construction service profession. The Construction Services Development Institute can use Blockchain to increase the security of the construction service profession certification system. Blockchain is a collection of blocks containing transaction data that are linked or linked (chain) and sequenced with each other.⁴¹ Blockchain uses peer to peer and sharing security techniques in storing data, peer to peer allows data to be transferred to more than one server, while sharing security provides layered security in data storage.⁴² With the

³⁸ Muhammad Rizqi Nur, Luqman Hakim, dan Yusuf Amrozi, "Challenges in Using Blockchain for Supply Chain Management Information Systems," *Jurnal Teknik Industri* 15, no. 2 (2020): 87–88, https://doi.org/10.14710/jati.15.2.82-92.

³⁹ Rebecca Yang dkk., "Public and Private Blockchain in Construction Business Process and Information Integration," *Automation in Construction* 118 (2020), https://doi.org/10.1016/j.autcon.2020.103276.

⁴⁰ Xiwei Xu, Ingo Weber, dan Mark Staples, "Architecture for Blockchain Applications" (Switzerland: Springer International Publishing, 2019).

⁴¹ Teguh Prasetyo Utomo, "Implementasi Teknologi Blockchain di Perpustakaan : Peluang, Tantangan dan Hambatan," *Buletin Perpustakaan Universitas Islam Indonesia* 4, no. 2 (2021): 176.

³⁶ Sudaryono; Sudaryono dkk., "Application of Blockchain Technology for Ilearning Student Assessment," *IJCCS (Indonesian Journal of Computing and Cybernetics Systems)* 14, no. 2 (2020): 212, https://doi.org/10.22146/ijccs.53109.

³⁷ Sudaryono; Sudaryono dkk., "Application of Blockchain Technology for Ilearning Student Assessment.," *IJCCS (Indonesian Journal of Computing and Cybernetics Systems)* 14, no. 2 (2020): 209, https://doi.org/10.22146/ijccs.53109.

⁴² Inaz Indra Nugroho, Reza Pratiwi, dan Salsabila Rahma Az Zahro, "Optimalisasi Penanggulangan Kebocoran Data Melalui Regulatory Blockchain Guna Mewujudkan Keamanan Siber di Indonesia," *Ikatan Penulis Mahasiswa Hukum Indonesia Law Journal* 1, no. 2 (2021): 184, https://doi.org/10.15294/ipmhi.v1i2.53698.

passing of the Personal Data Protection Law as a form of state administration policy in protecting and providing legal certainty for citizens regarding individual rights, Blockchain is a preventive effort to prevent cybercrimes. The Ministry of Communication and Information can participate in optimizing blockchain with public service policies related to personal data requiring the use of Blockchain, in accordance with the duties of the Ministry of Communication and Information Technology Regulation Number 20 of 2016 concerning Protection of Personal Data in Electronic Systems, namely ensuring the security of people's personal data in cyberspace.

CONCLUSION

Recognition of the competency and quality of construction service workers is an absolute requirement for licensing construction service business entities in addition to having a business entity certificate and license. Construction services professional certification can include a Work Competency Certificate, Work Skills Certificate, and/or Work Skills Certificate. The procedures and flow of procedures for implementing construction work competency certificates are regulated in Minister of Public Works and Public Housing Regulation Number 8 of 2022 concerning Procedures for Implementing Construction Services Standard Certificate Fulfillment in the Context of Supporting Ease of Business Licensing for Construction Services Business Actors. Work Skills Certificates are given to experts who have expertise and knowledge in fifty-one sub classification fields. Meanwhile, the Job Skills Certificate is given to skilled workers who have expertise and skills, generally this certificate is to show them as leaders in the technology field.

The Construction Services Development Institute is a non-structural institution that is under and responsible to the relevant Ministry. The Construction Services Development Institute was formed to carry out some of the authorities of the Central Government. In carrying out the duties of the Construction Services Development Institute related to the certification of the construction services profession as a public service institution, the Construction Services Development Institute must guarantee the security and safety of services. Cybercrime cases involving the taking of Work Competency Certificates, Work Skills Certificates, and/or Work Skills Certificates by irresponsible parties are acts of violation against the law as regulated in the Personal Data Protection Law. Preventive measures to prevent cybercrime due to advances in technology and information, data storage systems must also be upgraded to increase security. The Construction Services Development Institute can collaborate with the Ministry of Communication and Information regarding policies for using Blockchain.

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