

http://ijssrr.com editor@ijssrr.com Volume 6, Issue 5 May, 2023 Pages: 774-783

Legal Implications of Control of Electronic Resources by the State

Ardhiwinda Kusumaputra¹; Sudarsono²; Moh. Fadli²; Sukarmi²

¹ Doctoral Program Student, Faculty of Law, Universitas Brawijaya, Indonesia

² Faculty of Law, Universitas Brawijaya, Indonesia

E-mail: ardhiwinda_fh@uwks.ac.id; sudarsono@ub.ac.id; mfadliph@ub.ac.id; sukarmi@ub.ac.id

http://dx.doi.org/10.47814/ijssrr.v6i5.1375

Abstract

The growth of the e-commerce industry in Indonesia is experiencing rapid growth, but relevant legal and regulatory challenges continue to increase. Existing regulations are not sufficient to provide adequate legal protection for e-commerce actors and users. In this research, we discuss the role of the state in managing and utilizing electronic information resources and the state's efforts to ensure the security and effectiveness of e-commerce transactions. This study uses normative legal research methods with a philosophical and analytical approach. We explore existing regulations and detail the steps governments and industry should take to improve infrastructure and ensure better legal protections for all parties involved in e-commerce. The government must act as a regulator in developing the e-commerce climate by providing policies and regulations that support the implementation of electronic transactions in e-commerce.

Keywords: E-commerce Industry; Legal Regulations; Legal Protection

Introduction

The main legal basis in Indonesia is actually based on the 1945 Constitution, which in practice cannot conflict with these regulations. As a rule of law (*Rechtsstaat*), Indonesia lives as a state based on law, not politics or the economy and is charged with responsibility as a protector of the people.

Article 33 of the 1945 Constitution paragraph 3 stipulates " *Earth, water and natural resources* which contained therein shall be controlled by the state and used for the same amount the great prosperity of the people". Terms that determine the scope of the warranty the attachment of the function of state control over "*Earth, water and natural resources which contained* "in it". The phrase "in it" shows what is meant within the scope of the function of state power is concerned on the surface land (earth), while all the natural wealth that is "on it" as if is not the scope controlled by the state.

Volume 6, Issue 5 May 2023

Thus the role of the development of the world economy which is taking place very quickly, the flow of globalization and free trade as well as advances in technology, telecommunications and information have expanded the space for transactions of goods and services offered to be more varied, both goods and services produced domestically and abroad. This progress has brought many telecommunications facilities and sophisticated information technology products that are able to integrate all information media to facilitate all human activities in everyday life. In the midst of an increasingly integrated globalization of communication (global communication network), the internet has become popular and has made the world smaller (shrinking the world) as well as fading national boundaries along with the sovereignty and order of society.

Globalization of information has positioned Indonesia as part of the world information society, which necessitates the establishment of arrangements regarding the management of Information and Electronic Transactions at the national level so that the development of Information Technology can be carried out optimally, evenly distributed, and spread to all levels of society in order to educate the nation's life. So that the use and utilization of Information Technology must continue to be developed to maintain, maintain, and strengthen national unity and integrity based on Legislation in the interest of the nation.

Electronic Information is an sdtu or a set of electronic data, including but not limited to writing, sound, images, maps, designs, photographs, electronic data interchange (ED4), electronic mail, telegrams, telex, telecopy or the like, letters, signs, numbers, Access Codes, symbols, or processed perforations that have meaning or can be understood by people who are able to understand them. Meanwhile, Electronic Documents are any Electronic Information that is created, forwarded, sent, received, or stored in analog, digital, electromagnetic form, optical, or the like, which can be seen, displayed, and/or heard through a Computer or Electronic System, including but not limited to writing, sound, pictures, maps, plans, photos, or the like, letters, signs, numbers, Access Codes, symbols or perforations that have meaning or meaning or can be understood by people who are able to understand them.

The use of electronic resources for all of society has had a major impact on the development of the nation and state. Thus, there are many new legal aspects found in this utilization, both in the use, utilization and other legal aspects which are essentially regulated and controlled by the state, including Indonesia.

The Association of Indonesian Internet Service Providers (APJII) found in a 2016 poll that 132.7 million Indonesians, or 52.7% of the country's population, use the internet. According to him there are a total of 86.3 million people (or 65%) calling the island of Java as their home. Better communication networks can already be found on the island of Java compared to other islands, and this is not only due to population growth. According to data compiled in 2014, there are 88 million people using the internet in Indonesia. This growth is in line with the trend of declining prices for communication devices (smartphones) and increasing competitiveness, as well as the trend of improving communication infrastructure by telecommunications providers in Indonesia.

Technological advances have brought rapid changes and shifts in a boundless life in an era this globalization. Globalization is process of removing various controls impede the movement of trading performance and capital to extend the reach as wide as a globe.

The use of technology has encouraged business growth rapidly, because various information can be presented through long distance relationship and those who want to make transactions do not have to face to face, but enough through computer and telecommunications equipment. The development of information technology as well forming a new world society no longer constrained by territorial boundaries and has turned everything far away close to what is imaginary becomes real. Internet and information technology is innovations in the last decade that affect human life. Some human activities change drastically significantly by taking advantage of efficiency, effectiveness and mobility.



Volume 6, Issue 5 May 2023

Information technology law has been encouraged with the convergence between telecommunication and informatics technology and one of them is to encourage the birth of an alternative to conducting business activities known as trade through electronic (hereinafter referred to as *ecommerce*).

Electronics Commerce (E-Commerce) is a examples of advances in information technology, where business transactions are no longer conducted conventionally, which requires Buyers interact directly with sellers or there is a need to use money cash. But the seller is represented by a system that serves *online buyers* by means of a computer network. In making transactions, a buyers face to face and communicate with a system that represents the seller. By therefore, this E-Commerce requires capable system infrastructure transaction security.

Electronic transactions the internet according to Julian Ding as quoted by Mariam Darus Badrulzaman determines that:

"Electronic Internet, or E – internet as it is also known is a commercial transactions between a vendor and phurchaser or parties in similar contractual relationships for the supply of goods, services or the acquisition of "right". This commercial transaction is executed or entered into an electronic medium (or digital medium) when the physical presence of the parties are not required. And the medium exits In a public network or system as opposed to a private network (closed system). The public network or system must be considered an open system (e. g the internet or the world wide web), the transactions are concluded regardless of national boundaries or local requirements"

From the description above it is known that internet electronic transactions are electronic commerce between sellers with buyers to provide goods, services or take over right. This contract is carried out by electronic media where the parties are not is physically present and the medium exists in a common network with open system, namely the internet or *the world wide web*. This transaction occurred regardless of regional boundaries and national requirements.

The Era of Global Transactions requires reflected *Digital Economy* support with the birth of trading activity electronically (*electronic trading*), in various activities such as: retail trade, auction of goods, service offerings, and so on. As consequently, the traditional shop was replaced by an electronics store known as name: *Cyberstore*, *Virtual Store*, *Digital Market*, *Electronic Mall*, *Online Shop* and other etc. digital growth This economy certainly has an impact positive or negative to life global economy that no longer recognizes territorial boundaries of a country.

domestic *e-commerce* industry is increasing rapidly in the midst of a slowdown in the country's economic pace. Moreover, most *e-commerce business actors* in Indonesia are small and medium scale. As we know, business is the most resilient business even in times of economic crisis. Through *the e-commerce industry*, it can continue to be developed and support the Indonesian economy which is predicted to become a new world economic power in 2020.

Not only to seek information and interaction online, people in big cities are now making *e-commerce* part of their lifestyle. The consumptive behavior of tens of millions of middle class people in Indonesia is the reason why e-commerce in Indonesia will continue to grow. This business has enormous business value, but unfortunately until now there are no specific regulations governing this online business. At the end of 2014 alone, the business value of the Indonesian e *-commerce industry* reached USD 12 billion.

The Indonesian government wants to position Indonesia as the largest Digital Economy Country in Southeast Asia in 2020. The current condition is that there are many e-commerce e-business players,



Volume 6, Issue 5 May 2023

both online trading and digital *startups*, with fresh and innovative ideas who lack access or funding. to grow its business. The government will encourage the growth of new technopreneurs, both by mentoring leading technopreneurs, data centers, technoparks, and providing funding. Meanwhile, business people are expected to be able to move up to become big business actors, even expanding to international level.

Strengthening the technical infrastructure, strategy business, and digital marketing strategy not no doubt played a role important to increase profitability *e-commerce*. However, development and business strengthening must also be accompanied with legal protection the risks that may arise in *e-commerce* activities and transactions between online businesses with consumers. Among these legal risks are related to transaction security, either in terms of payment, logistics and *delivery*, identity authentication, protection to privacy and data, services and solutions complaints from consumers, contractual relationsbuying and selling, including the risk of claims from other third parties. For example on in 2016*e-commerce company* from Singapore, Lazada5, was widely discussed by *netizens* that several lazada accounts were compromised. However, Lazada denied the account breaches, Lazada explained that thing It happened because of the possibility *phishing* against the victim's account, so The hacker managed to retrieve the username and password. But that reason is not acceptable, because it is appropriate Lazada must guarantee a level of security the *e-commerce* system is at that level the highest so consumer data not easy to steal let alone in it also take advantage of online payments electronically and using credit cards whose data is strictly confidential.

As described above. The need for electronic resources is indeed a legal issue that rarely gets the government's attention. This technological advancement has made electronic transaction actors get legal aspects that are not only positive but also negative. The presence of the state as a forum to provide protection for business actors raises questions about state control over their utilization, both in terms of legal protection, economic disability and in terms of legal benefits for the survival of the people and the nation.

The aspect of state control over electronic transactions is also very prone to causing conflict with other countries, whose market place or legal entity is abroad and transactions are carried out online, which will actually be very detrimental to the perpetrators of the transaction, both in terms of responsibility and legal protection.

Formulation of the Problem

Based on the description and explanation above, the author wants to examine the issues related to: *First*, can the state exercise control over electronic information resources? *Second*, what are the roles and efforts of the state in controlling electronic information resources?

Research Methods

Normative law research, namely using normative legal case studies in the form of legal behavior products, for example reviewing draft laws. The main subject of the study is law which is conceptualized as a norm or principle applies in society and become a reference for everyone's behavior. So that this type of research focuses on positive law inventory, legal principles and doctrine, legal discovery in *in concreto cases*, legal systematics, level of legal synchronization. The research approach used is philosophical and analytics. Approach statutory approach is taken (*Statute Approach*) by using primary legal materials (legal products), secondary (Library Study) and tertiary (dictionaries, internet and other credible sources). As for technique analysis Which used is a method of legal interpretation aimed at Get clarity on something.

Volume 6, Issue 5 May, 2023

Research Discussion Results

1. State Control over Electronic Information Resources

The State of Indonesia, specifically Article 33 of the 1945 Constitution, is an article known as the Indonesian ideology and political economy article, because it contains provisions regarding state control rights over:

- a) Production branches which are important for the state and affect the life of the people at large; And
- b) Earth and water and the natural resources contained therein must be used for the greatest prosperity of the people.

One of the things that is still being debated is regarding Article 33 The 1945 Constitution is about the notion of "state control rights" or some call it "state control rights". In fact, the provisions formulated in paragraph (2) and paragraph (3) of the 1945 Constitution are exactly the same as those formulated in Article 38 paragraph (2) and paragraph (3) of the 1950 Constitution. It means that in this case, for 60 years Indonesia was independent, as long as At the same time, the space for debate over the interpretation of Article 33 has not yet received a uniform interpretation.

According to Van Vollenhoven, the state as the highest organization of the nation is given the power to regulate everything and the state, based on its position, has the authority to rule law. ⁷ In this case state power is always associated with the theory of sovereignty (*sovereignty or souverenitet*). Meanwhile, according to JJ Rousseau stated that state power as a body or people's organization originates from the results of community agreements (*social contracts*) which are essentially a form of unity that defends and protects shared power, personal power and belongs to each individual.

In essence, power is not sovereignty, but state power is also not unlimited power, because there are several binding legal provisions himself like the laws of nature and the laws of God as well as the laws that are common to all nations which are called *leges imperii*.

In line with the two theories above, theoretically state power over natural resources comes from the people, known as the nation's rights. The state in this case is seen as having the character of an institution of the general public, so that it is given the authority or power to regulate, manage and maintain (supervise) the use of all potential natural resources in its territory intensively.

Linkage with state control rights with the greatest prosperity of the people will realize the state's obligations as follows:

- a) All forms of utilization (earth and water) as well as the results obtained (natural wealth), must significantly increase the prosperity and welfare of the community.
- b) Protect and guarantee all the rights of the people contained in or on the earth, water and certain natural resources that can be produced directly or directly enjoyed by the people.
- c) Prevent any action from any party that will cause the people to not have the opportunity or will lose their rights to enjoy natural wealth.

The three obligations above explain all guarantees for the purpose of state control rights over natural resources which at the same time provide an understanding that in said control rights, the state only carries out management (<code>bestuursdaad</code>) and processing (<code>beheersdaad</code>), not to carry out eigensdaad.

Muhammad Yamin formulates the notion of being controlled by the state including organizing and/or organizing especially to improve and increase production by prioritizing cooperatives. The Finance



Volume 6, Issue 5

and Economic Committee formed by the Investigative Agency for Preparatory Efforts for Indonesian Independence (BPUPKI) chaired by Mohammad Hatta formulated the meaning controlled by the state as follows:

- a) The government must become a supervisor and regulator based on people's safety;
- b) The larger the company and the greater the number of people who depend on it for their livelihood, the greater the government's participation;
- c) Land must be under state control; and (4) Large mining companies run as state enterprises.

Bagir Manan formulated the scope of the meaning controlled by the state or state control rights, as follows:

- a) Mastery is a kind of ownership by the state, meaning that the state through the Government is the only authority holder to determine the right of authority over it, including here the land, water and wealth contained therein.
- b) Regulate and supervise the use and utilization,
- c) Equity participation and in the form of state enterprises for certain businesses.

If we relate it to the concept of the welfare state and the functions of the state according to W. Friedmann, we can find the following critical studies: The state's control rights stated in Article 33 of the 1945 Constitution position the state as the regulator and guarantor of people's welfare. The functions of the state cannot be separated from one another, meaning that releasing a field of business on natural resources to cooperatives, the private sector must be accompanied by special forms of regulation and supervision, therefore the obligation to realize the maximum prosperity of the people can still be controlled by the state.

State control rights in Article 33 of the 1945 Constitution, justify the state to exploit natural resources related to public utilities and public services. On the basis of philosophical considerations (the basic spirit of the economy is joint ventures and kinship), strategic (public interest), political (preventing monopolies and oligopolies) Which harm economy country), economy (efficiency And effectiveness), And by well-being general And profusely prosperity people.

Based on the description above, it is said that state control to utilize resources is a fundamental principle. However, if this mastery is associated with electronic transactions, of course it will be different. This is because electronic transactions are not only related to the authority of the state itself. But there are other legal provisions in several different countries that have their own rules.

Thus the use and control of the state over electronic transactions does not have binding legal force. This is an important issue for the government as a fulfillment in the aspect of legal protection and benefits for electronic transaction actors.

Indonesia itself has issued regulations regarding the use of electronic resources as stipulated in the Law of the Republic of Indonesia Number 11 of 2008 concerning Information and Electronic Transactions, but once again it is emphasized that Indonesia does not have full power over the use of electronic transactions.

Even if you don't have full power. Indonesia does not relinquish full control over its utilization. This is as stated in Article 1 Paragraph (5) of the Law of the Republic of Indonesia Number 11 of 2008 concerning Information and Electronic Transactions which states that: " *Operation of Electronic Systems is the use of Electronic Systems by state administrators, Persons, Business Entities, and/or the public*." From this description, it has been emphasized that the Indonesian state is only the enforcer of law in its utilization, not having full authority over all electronic-based transactions.

Volume 6, Issue 5 May 2023

Article 1 paragraph (20) also explains that: "Domain name is the internet address of state administrators, individuals, business entities, and/or the public, which can be used to communicate via the internet, which is in the form of a code or arrangement of characters that is unique to indicate a particular location on the internet. "And Article 1 paragraph (21) also confirms that: "People are individuals, both Indonesian citizens, foreign nationals, and legal entities." From the whole article above, it is confirmed that the Indonesian state does not have full control over the use of electronic resources.

2. The Role of the State in Control over Electronic Information Resources

Internet technology, which was originally created only to publish information, has now changed to become more interactive, which can create a reciprocal process and become a means for transactions. Likewise, with the mechanism of transactions and payments as well as delivery. The trade transactions have now turned into one-stop shopping. where the transaction agreement includes an agreement on goods or services along with payment and delivery, so that the whole includes the flow of information, the flow of money and the flow of goods.

Principles of trade policy electronically, that is basically directed to the mandate of giving legal protection of interests users or consumers (*user's centric*). Matter these are passed down as principles law or at least some of it important thing that must be considered by the perpetrator trade organizer business electronics, including:

- a. Trade must be built upon the basis of good faith and respect the principle of trustworthiness to accountability good electronic system;
- b. Electronic commerce is a must efficient and effective so constraints high economic costs must be eliminated;
- c. Trade is expected fostering a climate of business competition healthy; And
- d. Trade is expected provide convenience and protect consumer interests and prevent any attempt to exploit consumer rights.

From this general policy framework, it is necessary to make efforts to improve the national legal system and develop new legal rules in order to oversee the increasing development of electronic commerce. In accordance with the dynamics of telematics development, e-commerce policies cannot be separated from policies and regulations on communication resources and telecommunications network infrastructure.

In the context of telematics, electronic commerce is actually in the application and content layer after the network administration layer as the infrastructure and means of trading. There is a paradigm difference between network regulation and application and content regulation. In the context of infrastructure, the focus is to be able to create a fast internet connection that can be accessed from all regions of the Unitary State of the Republic of Indonesia, the development is as befits physical development, namely in the form of building Fiber Optic network infrastructure or using satellites (Palapa Ring).

Meanwhile, the opposite can be said for applications and content, because the existence of applications and content can be dynamic according to the thoughts and needs of application and content creators, not limited to physical development such as connection network infrastructure. Therefore, in the implementation of applications and content that operates on an internet connection network, it does not require a permit like the physical construction of an internet connection network infrastructure. What must be ensured is that the application and content that it runs fulfills all aspects of legal eligibility for an electronic system and transaction operator for the benefit of e-commerce transactions in accordance with applicable regulations.

Volume 6, Issue 5

Government as regulator in the development of *e-commerce climate* setting up policies and regulations support the implementation of electronic transactions in e *-commerce*, including by:

- 1.Law of the Republic of Indonesia a No. 11 of 2008 concerning Information and Electronic Transactions (ITE). has been made into law Number 19 of 2016 (UU ITE). Laws drafted by the government (Kemenkominfo) together with the DPR for managing all aspects *of engineering process*. This law regulates information and electronic transactions, or information technology in general. This Law have jurisdiction that applies to everyone who does the deed law as stipulated in This Act, both of which are in jurisdiction of Indonesia and outside the jurisdiction of Indonesia, which owns legal consequences in the jurisdiction of Indonesia and/or outside the jurisdiction of Indonesia and detrimental to the interests of Indonesia. Information and settings electronic transaction refers to several international instruments, such as *the UNCITRAL Model Law on ec commerce* and *the UNCITRAL Model Law on eSignature*. This section is intended to accommodate the needs of the business people on the internet and society generally for certainty law in transactions electronic.
- 2. Republican Government Regulations Indonesia No. 82 of 2012 concerning Implementation of Systems and Transactions Electronics (PSTE).
- 3. Law Number 7 of 2016 About Trade
- 4. Bank Indonesia Regulation No.11/12/ PBI/2009 concerning Electronic Money (Electronic Money)

Based on the above, it is necessary to coordinate authority between the supervisory and supervisory agencies of the network, namely the Ministry of Communication and Informatics (Kemkominfo) and the supervisory and supervisory agencies of the trade system, namely the Ministry of Trade. The Ministry of Communication and Information is responsible for every aspect of the engineering process, while the Ministry of Trade is responsible for every aspect of the business process. On the technical side, every operation of an electronic system must meet the eligibility or accountability of the electronic system according to technical standards, while on the business side, every operation of a trading system must meet trade standards.

Conclusion

In answering questions related to control and utilization of electronic information resources by the state, it was concluded that the Indonesian state does not have full power over this matter. Based on the Law of the Republic of Indonesia Number 11 of 2008 concerning Information and Electronic Transactions, the state has the role of operator in the utilization of electronic resources, not as the full authority. Nevertheless, the role of the state is very important in the regulation and regulation of electronic transactions, as well as providing legal protection for business people and the public in electronic transactions. This includes aspects of transaction security, protection of privacy and data, settlement of consumer complaints, and other risks of lawsuits. On the other hand, the state also plays an important role in encouraging the growth and development of the e-commerce industry through various policies and regulations. For example, with the Law of the Republic of Indonesia No. 11 of 2008 concerning Information and Electronic Transactions and Republic of Indonesia Government Regulation No. 82 of 2012 concerning Implementation of Electronic Systems and Transactions. The main advice that can be given is the importance of strengthening the legal and regulatory framework governing electronic transactions, as well as increasing coordination between agencies or institutions that have a role in the regulation of electronic transactions. In addition, the government must always involve various parties such as information technology consultants and electronic transaction observer associations in the process of forming electronic transaction regulations and policies. Thus, Indonesia can achieve its goal of becoming the largest digital economy country in Southeast Asia and securing and protecting its people in conducting electronic transactions.

References

- Arsyad Sanusi, *Efektivitas UU ITE dalam Pengaturan Perdagangan Elektronik (E- Commerce)*, Jurnal Hukum Bisnis, 29 (1), 2010.
- Asosiasi Penyelenggara Jasa Internet Indonesia, *Infografis: Penetrasi & Perilaku Pengguna Internet Indonesia*, 2016, diakses pada tanggal 12 Agustus 2017.
- Bagir Manan, Pertumbuhan dan Perkembangan Konstitusi Suatu Negara, Bandung: Mandar Maju, 1995.
- Daniel Zuchron, Menggugat Manusia dalam Konstitusi: Kajian Filsafat atas UUD 1945 Pasca Amandemen, Jakarta: Rayana Komunikasindo, 2017.
- Edmon Makarim, Kerangka Kebijakan Dan Reformasi Hukum Untuk Kelancaran Perdagangan Secara Elektronik (E-Commerce) Di Indonesia, Jurnal Hukum dan Pembangunan Vol. 44 No 3 2014.
- https://apjii.or.id/content/read/39/264/Survei- Internet-APJII-2016.
- Imam Lukito, *Tantangan Hukum Dan Peran Pemerintah Dalam Pembangunan E-Commerce*, JIKH Vol. 11 No. 3 November 2017.
- Jimly Asshiddiqie, Pengantar Ilmu Hukum Tata Negara, Konstitusi Press, Jakarta, 2006.
- Joko Susanto, Kajian Teoritik Tentang Pengaruh Globalisasi Terhadap Proses Demokratisasi, Masyarakat, Kebudayaan dan Politik, Th XIII, No 2, April 2000.
- M.Sukrisno Mardiyanto, *Orasi Ilmiah Peranan Informatika dalam Pengembangan E-Commerce*, http://jurnalkopertis4.tripod.com/16-3.htm diakses 24 Juli 2015.
- Muhammad Yamin, Proklamasi dan Konstitusi, Jakarta: Djembatan, 1954.
- Notonagoro, Politik Hukum dan Pembangunan Agraria, Jakarta: Bina Aksara, 1984.
- Peraturan Bank Indonesia No.11/12/ PBI/2009 tentang Uang Elektronik (Electronic Money).
- Peraturan Pemerintah Republik Indonesia No. 82 Tahun 2012 Tentang Penyelenggaraan Sistem dan Transaksi Elektronik (PSTE).
- Shinta Dewi, Cyberlaw 1 Perlindungan Privasi Atas Informasi Pribadi Dalam Ecommerce Menurut Hukum International, Bandung: Widya Padjajaran, 2009.
- Syofyan Hadi, Sudarsono, Istislam, dkk, "The Authority of Administrative Justice as the Executor of Judicial Authority", International Journal of Multicultural and Multireligious Understanding (IJMMU) Vol. 7, No. 7, August 2020.
- Tri Hayati, dkk, Konsep Penguasaan Negara di Sektor Sumber Daya Alam berdasarkan Pasal 33 UUD 1945, Jakarta: Sekretariat Jenderal MKRI dan CLGS FHUI, 2005.
- Undang-Undang Nomor 19 Tahun 2016 (UU ITE).
- Undang-Undang Nomor 7 Tahun 2016 Tentang Perdagangan.
- Undang-Undang Republik Indonesia Nomor 11 Tahun 2008.
- UUD 1945.



Volume 6, Issue 5 May, 2023

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).