Role Model of Legal Support for Implementation of a Smart City in Indonesia

Prawitra Thalib, Faizal Kurniawan, Hilda Yunita Sabrie, Wahyu Aliansa
Faculty of Law, Universitas Airlangga, Surabaya, Indonesia, Email: prawitra@fh.unair.ac.id

The development of life in society, especially in urban areas, is marked by technological advances. The existence of this technological advancement makes all things in all aspects of life more effective and efficient. One of the technological developments in the city today is the creation of the idea of a "smart city" which is a city that has integrated information and communication technology in everyday human activities. A smart city aims to improve efficiency and services in the public sector and of course to improve welfare for residents. In Indonesia, there are already several cities that implement the "smart city" idea, one of which is the city of Surabaya, which is a city that has "smart city" ties for 3 consecutive years. In the City of Surabaya there are 6 important elements; namely government, living, economy, mobility, people and environment. However, in the implementation of a "smart city" in several cities in Indonesia, there are still some obstacles, one of which is the lack of the creation of a rule of law as an umbrella for the application of the "smart city" idea. Because then, if there is no regulation, every city that wants to implement the "smart city" idea arises doubts. So it is very necessary for the role of law to support the development of various new policies that will be implemented by a city, one of which is by constructing a legal product as an instrument in policy enforcement.

Keywords : *Technology Development, City, Smart City, Legal Regulation*

Introduction

The development of Information and Communication Technology in Indonesia, has made all aspects of the development of people's lives in Indonesia more advanced (Ayuwuragil, 2017). The existence of changes and developments is characterised by various systems and services in the community that makes it easier for people to complete their daily work and help solve

problems that arise in everyday life (Listya, 2015). Technological developments are increasingly being experienced by people in urban areas, because most urban communities are fast adapting to technological developments which are changing rapidly. Thus, an idea of a intelligent city or "*smart city*" emerged. In short, the notion of *smart city* is "*a city that can manage all resources effectively and efficiently in solving various challenges, using innovative, integrated and sustainable solutions*". In order to create the right application of a smart city in a city society, support from various aspects of the community's life is needed.

It is not just the technological aspects that plays an important role in applying the "*smart city*" idea, but the readiness of the community and the government also needs to be considered. A city that is or will implement its city as a smart city must also prepare a society that is able to adapt to new developments. In addition, the role that government must play are preparing tools for implementation, and preparing regulations or a set of legal rules in the process of implementing the "*smart city*". The presence of regulations is very urgent because now many cities want to adopt the *smart city* platform, but need clear guidelines (Pahlevi, 2017). The law has an important role to play in creating regulations that are able to support cities to be smarter. Prof. Suhono Supangkat the Chair of the Smart Initiatives Forum conference committee said because a *smart city* needs policy guidelines, there is a need for regulations to encourage *smart cities*.

In fact, there have been many discussion forums to draft regulations regarding implementing *smart cities* which will be completed in 2017. However, until now there have been no regulations for implementing *smart cities,* even though there are already several cities in Indonesia that are implementing the *smart city* idea. There were no regulations until 2019, so it is fitting, that the law takes the role of creating a city that has regulations to support the change of a city into a *smart city*.

The Smart City and Its Application in Several Cities in Indonesia

The development of information and communication technology at this time gave birth to concepts and ideas to develop a country that exists in this world in a more advanced way. Advancing in this regard is related to the increasingly organised public service sector, the development of increasingly improved environmental governance and other aspects that are becoming more organised with the advancement of information and communication technology. The development of technology and information is strongly felt by people living in urban areas, because urban communities are more adaptive with changes and have the availability of facilities and infrastructure to support the development of technology and information. The development of a city that involves the sophistication of information and communication technology, now called *smart city* or known as *smart cities.* Yahya defines *smart* as being, thinking and acting intelligently in the work done. Furthermore, he said that *smart* is realised by taste through sharp intuition, ratios through creativity and innovation that produce *breakthroughs* (*breakthrough*),

and sports through impressive actions. South Korea, translating *smart city* as a city of "knowledge", city of "digital", city of "cyber" or city of "eco" at the same time (Setiaji, 2018). If directly defined, *smart city* is a city area that has integrated information and communication technology in daily governance, with the aim of enhancing efficiency, improving public services, and improving people's welfare (Widjaja, et al. 2019). A city can also be called a smart city, if it can take advantage of the development of information and communication technology that is well supported by users and the community can easily utilise the technology. Because, a city is said to be intelligent not because it has sophisticated technology, but also needs to be followed by Human Resources (HR) who are also able to accept the developments that occur in a city.

At present, there are several cities in Indonesia that are developing the application of the *smart city* concept. This includes the cities of Jakarta, Bandung, Bekasi, Balikpapan, Surabaya, Yogyakarta and several other cities. According to Boyd Cohen, a researcher and professor who studied entrepreneurship, and a *smart city* in Universadad del Desarrollo Santiago, sparked six indicators in the concept of a *smart city* namely; *Smart Living, Smart Economy, Smart People, Smart Government, Smart Mobility, Smart Environment*. In Jakarta the implementation of a smart city is indicated by the existence of the *Smart City Lounge*, which is a control centre that is used to operate *smart cities* through ICT and is able to accept public complaints about social problems, traffic jams, garbage, crime, public services and so on. In addition, in the city of Bandung the implementation of a smart city is indicated by the creation of several applications that can be used as complaints against the people of Bandung. In an event that may occur in the city of Bandung such as the *Panic Button* application, the Flood Application that can provide information in *Realtime*. In addition to the application of the *smart city* embodiment in smart government elements in Bandung, it is indicated by the upgrade of the government system from paper to paperless with a user friendly information system. Then, the implementation of *smart city* was also shown in the city of Surabaya which won an award in the Smart City Award 2011 (Yahya and Arief, 2013). One of its applications was the presence of the *Surabaya Single Window* or SSW aimed at trimming various bureaucratic permits in Surabaya. And there are still many cities in Indonesia that are implementing *smart city* concepts to improve their cities so that they can make it easier for people to express their aspirations to the city government and facilitate access to public services. The presence of *smart cities* in Indonesia has so far had a good impact on the development of the city, so this concept needs to be maintained and continues to be developed in order to create further *smart cities* in Indonesia.

Legal Framework of Smart City in Indonesia

In implementing a *smart city* in several major cities in Indonesia such as the City of Jakarta and the City of Surabaya, it has a positive impact, but the application of *smart city* only to large cities in Indonesia, is not enough to bring Indonesian countries based on a *smart nation*. Because, to make a country based on a *smart nation*, then every city in a country must implement a *smart city* concept. In Indonesia, there are actually many cities that are relatively small but want to implement a *smart city*, only the government in their area is still in doubt because there are no

specific guidelines or guidelines regarding the implementation of a *smart city* in a city. The required guidelines are in the form of regulations specifically regulating the *smart city*.

The presence of this regulation is very important, because a variety of policies or ideas that are new especially to regulate the community, should have a strong legal basis. Because if we study more deeply, what is the foundation of the Indonesian state is law. This has been stated in Article 3 of the 1945 Constitution of the Republic of Indonesia which reads "The State of Indonesia is a state of law. With the presence of a *smart city* in the community, it makes a change in the dynamics of life in society as well, therefore officials or the government need to make a policy rule. Policy rules in this case are in the form of a regulation. The creation of regulations in the community are intended for all new ideas and concepts that exist in the community to be carried out in an orderly manner.

Thus, if regulations regarding a *smart city* have been formed, every city that implements a *smart city* or which is implementing a *smart city* does not have any hesitation and the legal umbrella in the form of this regulation becomes important in anticipation of obstacles in the application of *smart cities* in Indonesia. Constraints that can occur such as to what guidelines are appropriate in the process of implementation, were funding sources and technology sources, and what aspects must be directly related to the application of *smart cities* in Indonesia. Thus it is highly expected that there is an appropriate legal standing in the process of implementing a *smart city* in Indonesia.

Legal Perspective of Application of a Smart City in Indonesia

At present, there is no legal basis for regulations specifically regulating the application of a smart city. The presence of *smart cities* in Indonesia, is one form of innovation in the government system. Regarding the existence of innovation in the system of government, the author found one of the chapters in the Law on Regional Government Number 23 of 2014, namely in Chapter XXI Article 386 to Article 390 which discusses regional innovation. Article 387 states that, *in formulating an innovation policy, the Regional Government refers to the principle: a. increased efficiency, b. improvement in effectiveness, c. improving service quality, d. there is no conflict of interest, e. oriented to the public interest, f. done openly, g. fulfill propriety values, h. can be accounted for the results are not for their own sake*.

Indeed, basically, *smart cities* are included in one of the regional innovations, but still need special regulations. It was feared that at a later time there would be a deviation and if there was no strict regulation to take action, then there could be a legal vacuum. Actually, the entry of the concept of smart city in Indonesia, makes every city that is implementing the concept become more advanced and well developed, but still there needs to be a legal standing in it. Thus, the law in this case has an important role in supporting the city to be better which is currently related to the entry of the concept of *smart city* in several cities in Indonesia.

Therefore the regulation that is suitable for smart cities in Indonesia is the presence of a Presidential Regulation or Presidential Regulation. Because the Presidential Regulation is made with the aim of preventing the overlapping of smart city regulation in Indonesia, and the Presidential Regulation is included in the national-scale regulations, it is expected that each local government that implements a smart city in its area can refer to the Presidential Regulations. Regarding this Perpres it transpires that since 2017 the Director General of Regional Autonomy of the Ministry of Home Affairs, assisted by the Gadjah Mada University, Yogyakarta has been compiling regulations. In the process of drafting, the Director General of Regional Autonomy of the Ministry of Home Affairs requested assistance from academics, business, government and the smart city community to provide input regarding the preparation of the regulation. The contents of smart city regulations in the form of a Presidential Regulation, will regulate the smart city norms, systems, procedures and criteria. What has been planned, namely in the Presidential Regulation is more regulating of basic service standards such as e-government services or government. However, unfortunately until now, the Presidential Regulation regarding smart cities has not yet been formed. And if later, the Presidential Regulation is of a national nature and there are more regulates about e-government, then each local government can form a Regional Regulation which further regulates the smart city internal elements that will be applied in their area. Every region in Indonesia must have different plans related to the development of the area to be better in the future.

Indeed, basically, *smart cities* are included in one of the regional innovations, but still need special regulations. Because it was feared that at a later time there would be a deviation but there was no strict regulation to take action, then there could be a legal vacuum. Actually, the entry of the concept of *smart city* in Indonesia, making every city that is implementing the concept becomes more advanced and well developed, but still there needs to be a legal standing in it. Thus, the law in this case has an important role in supporting the city to be better which is currently related to the entry of the concept of *smart city* in several cities in Indonesia.

So that, the regulation that is suitable for *smart cities* in Indonesia is the presence of a Presidential Regulation or Presidential Regulation. Because the Presidential Regulation was made with the aim of preventing the overlapping of *smart city* regulation in Indonesia, and the Presidential Regulation included in national-scale regulations, it is expected that each local government that implements *smart city* in its area can refer to the Presidential Regulation. And regarding this Perpres it turns out that since 2017, the Director General of Regional Autonomy of the Ministry of Home Affairs has been compiling it and assisted by the Gadjah Mada University, Yogyakarta. In the process of drafting, the Director General of Regional Autonomy of the Ministry of Home Affairs requested assistance from academics, business, government and the *smart city* community to provide input regarding the preparation of the regulation. And the contents of *smart city* regulation in the form of a Presidential Regulation, which will regulate the smart city norms, systems, procedures and criteria. And what has been planned, namely in the Presidential Regulation is more regulating basic service standards such as e-government services or government. However, which is very unfortunate until now, the Presidential Regulation

regarding smart cities has not yet been formed. And if later, the Presidential Regulation is of a national nature and more regulates about e-government, then each local government can form a Regional Regulation which further regulates the smart city internal elements that will be applied in its area. Because, every region in Indonesia must have different plans related to the development of the area to be better in the future.

Conclusion

The application of the smart city concept in several cities in Indonesia, encourages a sense of pride in the city. However, for cities in Indonesia that are still going to implement smart cities in their cities, there is a sense of doubt if they want to implement them because there are no regulations governing the implementation of smart cities in Indonesia. So, in this case the law must play a role in the form and creation of smart city regulations. At this time the government, especially the Director General of Autonomy of the Ministry of Home Affairs along with academics, business people and practitioners, are drafting regulations in the form of Perpres. Thus, the role of law here is to support cities in Indonesia to be more advanced and improved through the creation of regulations for various new developments within a city in Indonesia.

REFERENCES

Ayuwuragil, K. (2017). Central government prepares regulations regarding smart city https://cnn.indonesia visited on May 6, 2019.

Listya, R. I. (2015). Regulations and policies required to go to smart city https://nasional.republika.co.id visited on April 28, 2019.

Pahlevi , G. A. (2017). Professor of ITB, Prof. Suhono, describes the concept of smart cities as a solution to Urban Problems https://www.itb.ac.id visited on April 28, 2019.

Setiaji, D. (2018). What is smart city and the challenge of implementation in Indonesia https://id.techinasia.com visited on May 5, 2019.

Widjaja, A. E., Chen, J. V., Sukoco, B. M., & Ha, Q. A. (2019). Understanding users' willingness to put their personal information on the personal cloud-based storage applications: An empirical study. Computers in Human Behavior, 91, 167-185.

Yahya. and Arief. (2013) *Great spirit grand strategy: Corporate philosophy, leadership architecture, and corporate culture for sustainable growth*. Jakarta: PT. Gramedia.