

ASO 2022 Problems in Challenge of World Digitalization

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Abstract

Migration content entry of analog television broadcast to digital and acceleration of Analog Switch Off (ASO) November 2022 in Job Creation Law provides great motivation for Government and broadcasting public. However, Indonesia still has to deal with problem of infrastructure readiness and broadcasting superstructure. By interpretive subjective approach, qualitative method, juridical normative and empirical juridical analysis described data mix, observations results, reference studies, internet searching, and documentation studies in form of Mapping the Problem towards ASO 2022 in challenges of world digitization. In conclusion, Government is committed to development accelerating of broadcasting sector through of analog migration to digital technology in line with steps to revise Broadcasting Law; Analog migration implementation to digital not enough with only Law Protection of Job Creation Law, but also required regulation complete as law basic of infrastructure and superstructure provision with immediately adapt, sync, and assign of Broadcasting Bill revisions to Law no. 32 of 2002 about Broadcasting.

Key Words: Broadcasting, Television, Migration, Analog, Digital, infrastructure, superstructure, Job Creation

Introduction

Broadcasting public Indonesia “had to” faced new era in enjoy television broadcast. Analog television eras will soon over replaced with digital technology. On 22 November in 2022, Indonesia Government declare Analog Switch Off (ASO) or termination of analog television broadcast throughout the region. The seriousness of Indonesian Government mapped with emergences of Article 60A as additional articles to Law no. 32 of 2002 about Broadcasting contained in Article 72 of Law No. 11 of 2020 about Job Creation which explicitly states with final limit of ASO.

The spectacular Indonesian Government Polices are not without reason. Although it seems hastily, it is in line with direct or indirect pressure of world broadcasting public tugging Indonesia to immediately play a role in broadcast digitization arena. A lot of big countries in the world, included the worlds in Southeast Asia have gone a long way to migrate from analog to digital broadcast. Indonesia, which incidentally categorized

as a large country in Southeast Asia, even though it has been proclaiming it for past dozen years, but in practice still in place. Therefore, it's natural if the end, must be born assertiveness through Job Creation Law [1].

Job Creation Law is a form of policy reformation of economic recovery accelerated Indonesia, so it is expected be able to become a quick solution to various problems of people's economic life. This strategic perception is also be basis, so broadcasting digitalization has also enriched substances of Job Creation Law. Indonesia Government Views, broadcasting digitalization is a part from strategic program development for people's economic life solution. Whereas, revision of Law no. 32 of 2002 about Broadcasting has also entered prolegnas [2] House of Representatives of Indonesia Republic.

However, because of broadcasting digitalization is not only effect to services quality improving of television broadcast, but also encouraging National Digital Transformation Program, migration television process of analog to digital, restructuring telecommunication and broadcasting industry also limited resource optimization (radio frequency spectrum). Job Creation Law contributed on Post, Telecommunication and Broadcasting Sector in Digital Transformation, New Job Creation, and Digital Economy Growth.

Even so, it does not mean that broadcasting digitalization in Indonesia will be without problems. Broadcasting world complex reality cause of involving many parties, from audiences, broadcasting institutions, manufacturers, television equipment traders to advertising industry players taking part and becoming an important instrument for existence of broadcasting. Moreover, Indonesia is a large country with a population more than 270 million and an area of approximately 7.81 million km² also has 17,499 islands with very variant topographical contours. Its condition besides being a great potential for advancement of broadcast digitization, but it's very possible and also raises quite severe obstacles also challenges in analog to digital migration process.

However, Mapping the Problem on realization efforts *Analog Switch Off* (ASO) towards migration success of analog television to digital broadcast be more important. Indonesia has a hope can align themselves with big countries that have long enjoyed digitization for a long time. But, Indonesia also must maintain a commitment to remain consistent with goal of improving lot of public, especially broadcasting public, so the effect of digitalization is not only raise image of country and government in eyes of the world, but also has an effect on the people's welfare, both physically and mentally.

Moving on the reality above, so which be starting problem in this study is doing Mapping the Problem on realization efforts *Analog Switch Off* (ASO) towards migration success of analog television to digital broadcast for raise image of country and government in eyes of the world towards better broadcast public. Mapping of these problems focuses on study question, what is the reason for integration articles related to broadcasting in Job Creation Law its relevance to revision of Broadcasting Law and how is the reality of readiness of broadcasting public in facing Analog Switch Off (ASO).

Study Method

Mapping the problem is done by studying it through an interpretive subjective approach with qualitative methods through: First, a normative juridical review of laws and regulations, such as Job Creation Law, Broadcasting Law, and other regulations which containing substances of analog to digital migration broadcasts as primary data reinforced by secondary data from references in form of scientific texts, media opinions, and expert opinions determined purposively.

Second, juridical empirical or sociological analysis, namely by combining studies of laws and regulations with social facts through observation of readiness of broadcasting public, both of context in the world of broadcasting public which has been

assumed to be main trigger for acceleration of policy migration for analog to digital television broadcasts in Indonesia also Indonesian broadcasting public which incidentally is assumed to be complex with various internal problems, such as broadcasting infrastructure and superstructure issues.

The result of the analysis above described with data mix, such as quantitative data also qualitative data result from observation, reference studies, internet searching, and other documentation studies in form of books, journals, research results, mass media, and others.

Result and Discussion

From Broadcasting Law to Job Creation Law

The emergences of broadcasting article in Job Creation Law, either directly or indirectly, has changed spirit of development direction of national broadcasting. Substantially, Law no. 32 of 2002 concerning Broadcasting does not convey migration spirit of analog to digital television broadcasts, especially aspiring Analog Switch Off (ASO). The dominant spirit of law is more focused on expressive freedom of broadcast content as well as protection of public through optimization of radio frequency spectrum resources. Historically, it is very reasonable because Law 32 of 2002 was born in spirit of reform, which, among other things, highly respects citizen rights to express themselves in place of Law no. 24 of 1997 which incidentally has centralization spirit of Government.

Many things have encouraged changes in direction spirit of broadcasting development in Indonesia. Even though cause of global information technology entering digital era, refers to information and communication Ministry, Johny G. Plate, left behind of digitalization of terrestrial television systems from other countries. Since World Radio communication Conferences [3], member countries of International Telecommunications Union (ITU) have agreed to arrange radio frequency spectrum band for terrestrial television services [3].

The use of frequency digitization can also be reorganized for provision of public services with fast internet. 700 MHz frequency band used by world terrestrial television broadcasts is the 'golden' frequency band because it is ideal for broadband internet access services. By migration of analog to digital. 328 MHz which not used by analog television, will produce spectrum efficiency with a Digital Dividend of 112 MHz and a total bandwidth of 90 MHz. Therefore, the use of frequency spectrum more efficient, industry increases competitiveness, and level of non-tax state revenue (PNBP) is optimal.

In frame of public interest, television digitization can be a solution for public who have suffered losses due to poor broadcast quality. Industry society (business people & investors) can adjust business patterns in line with development of digital era, so as to increase efficiency. In fact, if Indonesia does not immediately participate in digitization, it is feared that problems will arise with neighboring countries, especially in border areas. Indonesia has potential to be isolated from technology if it does not immediately implement digitalization and public will be the most disadvantaged.

These reasons are in line with steps to revise Law no. 32 of 2002 which also began in 2007 and continued with drafting of a Bill (RUU) and entered Prolegnas for 2009-2014 DPR RI service period, but until the end of the service period it had not been promulgated. Even during 2009-2014 DPR RI service period, revised Bill on Law No. 32 of 2002 on Broadcasting was re-entered into Prolegnas, even became one of about

sixty prioritized bills, but until the end of 2009-2014 DPR RI term it was not discussed. The same thing happened during 2014-2019 DPR RI service period and until the end of their service period, bill was also not discussed. At 2019-2024 DPR RI, Working Meeting of Legislation Body (Baleg) with Government also approved 248 bills to enter Prolegnas, one of which was a bill on amendments to revision of Law Number 32 of 2002 concerning Broadcasting.

In long away revision of Law No. 32 of 2002, among a number of proposed changes to content in article by article, there is digitization of terrestrial television broadcasting and stipulation of a deadline for analog technology uses or Analog Switch Off (ASO). In fact, ten points proposed for changes from Ministry of Communication and Information Technology, digitization of terrestrial television broadcasting is at number one priority. The others are related to LPP (Public Broadcasting Institution), Government Authority and KPI, regarding licensing, technology utilization, disabled audience priority, and implementation of force majeure broadcasting.

Direction of Indonesian broadcasting policy became more apparent when migration content of analog to digital television broadcasts or Analog Switch Off (ASO) was included in Article 72 of Law No. 11 of 2020 implemented by following technological developments, including broadcasting migration from analog technology to digital technology; (2) Migration of terrestrial television broadcasting from analog technology to digital technology and analog switch off shall be completed no later than 2 (two) years after entry into force of this Law.

What is included in Job Creation Law is not only the provision, but there are still several articles of amendment to Broadcasting Law, such as Article 16 concerning LPS (Private Broadcasting Institution), Article 25 concerning LPB (Subscription Broadcasting Institution), Article 33 concerning licensing, Article 55 concerning administrative sanctions, as well as Article 57 and Article 58 concerning criminal provisions. However, from a number of articles amended through Job Creation Law, although all of them are strategic, changes are paradigmatic and have a broad impact on public, including world public inclusion of Article 60A on analog to digital migration and analog switch off acceleration.

Migration of terrestrial television broadcasts from analog to digital and analog switch off, in addition to marking a paradigm shift in broadcasting platforms, through Job Creation Law which can be perceived as an "emergency" law, shows Government's commitment to accelerating development of broadcasting sector as well as indicating that broadcasting conditions have not contributed to national economic growth. The birth of Job Creation Law was a policy reform in accelerating economic growth.

Job Creation Law ad Omnibus Law is a method to replace and/or revoke and/or rearrange statutory provisions into one thematic law. The main vision of government is to give birth to Omnibus Law to change economic structure of all sectors to encourage faster economic growth. Implicitly Article 3 of Job Creation Law aims to create widest possible employment opportunities for Indonesian people equally. This is done in order to fulfill a decent living through convenience, protection and empowerment of UMKM and cooperatives; Improvement of investment ecosystem; Ease of doing business; Increasing protection and welfare of workers; and as well as Government Investment.

The Job Creation Law is a new milestone in Indonesian law. First time a comprehensive law was born to reform, synchronize and make changes to no less than 76 existing laws. Job Creation Law changes 76 laws, broadly includes: 1) improving investment ecosystem and ease of licensing, 2) protection and empowerment of UMKM

and cooperatives, 3) employment, 4) research and innovation, 5) ease of doing business,

6) land acquisition (land bank), 7) economic area, 8) Central Government investment and National Strategic Projects, 9) Government Administration Support, and 10) Sanctions.

Relate to broadcasting sectors, clearly that Ministry of Communication and Information Communication is broadcast Number 127/HM/KOMINFO/10/2020 that Job Creation Law bringing important changes in telecommunication sectors, broadcasting and post in Indonesia, especially in digital transformation acceleration, job creation and national economic growth. Three fundamental things affect Indonesia in field of information and communication technology (ICT), are breaking regulatory deadlock, implementing ASO in 2022 and preventing frequency inefficiency and passive infrastructure. ASO also eliminates potential for frequency interference between border countries, especially in ASEAN which has agreed to entirely migrate analog TV broadcasts to digital because ASO international agreement has been going on for a very long time. International Telecommunication Union (ITU) in 2006 ITU conference, decided that 119 ITU Region-1 countries must complete ASO by 2015. At regional level, ASEAN Declaration is committed to completing ASO 2020.

ASO will also have a tremendous impact, especially in saving 700 MHz frequency band as an ideal frequency for National Digital Transformation. Currently, using analog system, entire frequency capacity of 700 MHz of 328 MHz is used for TV broadcasting. With ASO, there will be savings (digital dividend) of 112 MHz which can be used for benefit of digital transformation. This will have an impact on increase in GDP increase; addition of new jobs; adding new business opportunities; and additional non-tax state revenue (PNBP).

The fact that infrastructure built by each Industry actor, apart from causing high costs, also has an impact on urban planning development, so it looks like there is no coordination with each other. In fact, with sharing infrastructure approach and even frequency sharing, Industry can optimal efficiency. With this strength, domestic telecommunications industry should be able to compete with global players, including over the top (OTT).

Readiness for ASO

Rightly, when Government stipulates that migration of analog television broadcasts to digital and analog switch off must have been realized in next two years, to be precise 22 November 2022, all broadcasting infrastructure and infrastructure are ready. Moreover, Government stipulated through Job Creation Law which was a "super emergency" Law, superstructure and infrastructure readiness were main requirements. If not, existences of law will be in vain; it will only be a "display".

Although Indonesia adheres to principle of legal fiction [4], are principle assumes that everyone knows law (*presumptio iures de iure*), including illiterate people who have never gone to school, or residents who live in remote villages. In Latin there is adage *ignorantia jurist non excusat*, ignorance of the law cannot be forgiven. A person cannot escape from bondage of law by arguing that they do not or do not know existence of laws and regulations.

It is can be interpreted, when Government issued Law no. 11 of 2020 concerning Job Creation, all Indonesian people, from Sabang to Merauke, must know and implement various provisions of Law. They must know and also implement of provisions regarding broadcasting articles, including migration of analog to digital television broadcasts and analog switch offs.

For Indonesia, which has a large population and multiple characteristics and a large area with varied natural contours, principle application of legal fiction requires extra hard work. Very unwise, if Government and DPR RI hit hammer, the law will be enacted, because of this principle, then they just stand idly by. If migration of analog to digital television broadcasts and analog switch off must be realized in the next two years, Government and Broadcasting public must work extra hard to socialize and literate all Indonesian people, especially broadcast public and other stakeholders.

This is very important for all broadcasting public and other stakeholders know, understand, and take actions that support realization of analog to digital television broadcast migration and analog switch off. Although Government is committed to immediately preparing broadcasting infrastructure and infrastructure, with condition of large population and territory, and limited time (less than two years) it is impossible to do it "alone". Public participation, especially broadcasting society, is an important and decisive instrument. Moreover, according to [5], main thing in digitizing television broadcasting is to encourage learning cycle process. The presence and changes of new technology were co-opted through learning activities. Learning process is carried out not only by practitioners, but also by industry, regulators and other communities.

Broadcasting infrastructure must be built "catch up", especially related to aspect of equity, so that areas that have been blank spots must be immediately resolved so that public can enjoy free to air (FTA) television broadcasts. Telecommunication and Information Accessibility Agency (BAKTI) (6) noted that there are still areas of Indonesia that experience cellular blank spots, especially in frontier, outermost and underdeveloped (3T) areas and borders. Even though 8,300 sites have been built, more than 5,000 more sites are still needed so that blank spots are served [6]. Nowadays, residential area in Indonesia 44,565 square kilometers with 83,218 villages. 2G services have reached 88.28% villages or 98.31% settlements, 3G, 75.09% villages and 92.91% settlements, and 4G, 50.88% villages and 74.09% settlements. Although construction of Palapa Ring is being carried out, both West Palapa Ring, East Palapa Ring and Central Palapa Ring will be one of solutions, but if operators are slow to open telecommunication access, that solution will be hampered. Infrastructure development in broadcast digitization must accelerate and expand range of various types

of broadcasting services, so that broadcast audiences are satisfied.

For areas that are free of blank spots it is not without problems. With migration of analog to digital television broadcasts, most of people who watch television broadcasts will lose their broadcasts because on average their television sets do not have technology connected to digital. To enjoy digital television broadcasts, they need an ultra-high frequency (UHF) antenna and add a digital broadcast receiver aid in form of a set top box (STB) decoder box. For most people in rural areas whose economic level is lower to middle, price of STB in market is quite expensive, so they need a high level of awareness when they have to buy.

If Government also provides subsidies by providing free STB, funds that must be prepared will be very large because number of television owners is very large. The results of Ministry of Communication and Information Technology's ICT Indicator Survey in 2015 alone showed that television owners in Indonesia were 86.7%, if multiplied by average population of 270 million, owners of television in Indonesia are around 232 million. If this amount is multiplied by STB X price in rupiah, for example, it will require large funds and a complicated distribution because area is spread out from Sabang to Merauke.

This difficulty can be taken a way out by growing participation of audience who still use analog television (conventional receivers) to be ready to switch with minimal risk of independently procuring STB. Therefore, simulcast policy (simultaneous broadcast between analog and digital) between regions with different economic capacities of public can be taken into consideration to be carried out in transitional stage towards total digitization. If analog switch off is implemented simultaneously in November 2022

as Ministry of Communications and Information Technology roadmap, potential of certain community groups, especially those in rural areas where digitalization is not reached, will become victims because they do not receive television broadcast services. Even though broadcasting is right of all Indonesian people without exception [7].

Analog Switch Off Policy for broadcasting Body is not without problems. Although in short term, digitalization cannot be separated from technical disadvantages. After migration from analog to digital, all broadcast material will be transmitted through multiplexing, so that old television broadcasters, especially local and network television, cannot be used anymore. Even though this equipment is their biggest investment.

Migration of analog television to digital and analog switch off it does not only concern infrastructure, but also superstructure because of broadcasting existences also involves all of relation aspects of life: social, cultural, economic, political, even defense and security. The result study of [8], concluded, migration of analog television to digital brought about radical changes in broadcast industry. Media convergences in digital television broadcasting has become increasingly sharp and intensive and has resulted in development of new business models, thus fostering new life by involving many new players.

The readiness of non-technological aspects, such as social, cultural, political, economic conditions, public literacy, and regulatory umbrellas in analog to digital television broadcast migration and analog switch off must ensure that all broadcasting stakeholders, including government, broadcasting bodies, and society, are not harmed. This will be achieved if analog to digital television broadcast migration program and analog switch off are oriented towards public benefit. Analog migration to digital cannot give birth to new inequalities and foster a sense of injustice in society. Media monopoly that has given birth to broadcast conglomerates which can hinder development of local broadcasting bodies must be completely eroded. Vision of democracy broadcasting system it must be reflected in guarantee of freedom of expression, freedom of speech, and freedom of the press as basic social and political rights of citizens [9].

The government, especially center government, both of President or the Ministry of DPR RI as public representatives shows the seriousness of analog to digital television broadcast migration program and analog switch off. The birth of changes and article additional of Broadcasting Law through Job Creation Law is a real fact of Government compactness. Government also through Ministry of Communication and Information strives to accelerate national digitalization very seriously, through: (1) completion of equitable and quality telecommunication and informatics infrastructure development,

(2) development of human resources or digital talent with adequate and sustainable numbers and quality, (1) 3) completing primary legislation in field of

telecommunications, informatics and data protection, and (4) strengthening international collaboration in digital economy and cross-border data flow [10].

However, as well as previous of broadcasting laws and regulations, accessibility of Regional Governments, both Provincial Government and Regency / City Government are still low. UU no. 32 of 2002 about Broadcasting, it is not bad, accessibility of Provincial Governments can be "represented" through existence of Provincial KPID (Regional Indonesian Broadcasting Commission). Provincial KPID members are elected by Provincial DPRD, appointed by Governor as the Head of the Provincial Region, and financed by Regional Revenue and Expenditure Budget (APBD). However, for Regency/City Governments there is almost no access to it. In fact, existence of broadcasting institutions and broadcast audiences is domiciled in regency/city, so directly or indirectly various problems related to broadcasting will become problems of Regency/City Regional Government.

That reality exacerbated by relationship loosening between KPI and Provincial Government after issuance of Law no. 23 of 2014 about Local Government. This Law "revokes" position of KPID in main duties and functions of Regional Government. This was made explicit when Government issued Government Regulation no. 18 of 2016 about Regional Apparatus, so the position of t KPID in Regional Government increasingly difficult. Facts on the ground after enactment of Law no. 23 of 2014 about Regional Government which has been amended twice and gave birth to Government Regulation No. 18 of 2016 about Regional Apparatus, institutional and financial conditions of a number of KPID in a number of provinces are facing difficult times.

Director of Regional Financial Implementation and Accountability, Ministry of Home Affairs, Arsan Latif said (*Koran Tempo Edisi 2017-03-24*, n.d.), that APBD can only be given directly to local government work units such as Health Service or Communication and Informatics Office. Because KPID is not an apparatus of Regional Government, it is considered not entitled to receive regional budgets. Whereas, this Government Regulation contradicts with Article 9 paragraph 6 of Broadcasting Law which clearly states that central KPI funding comes from State Revenue and Expenditure Budget (APBN) and Regional KPI come from Regional Revenue and Expenditure Budget (APBD).

Problems of Broadcasting infrastructure and infrastructure that have potential to hinder migration of analog to digital television broadcasts and analog switch off cannot be answered only by reforming regulations through broadcasting articles in Job Creation Law. Still other regulations are needed that focus on accelerating various problems and at the same time translating migration program of analog television broadcasts to digital and analog switch off more fully and applicable.

Broadcasting is a system, so also called as broadcasting system. System theory conception simply defined a part of group interacted and depends each other that make up a complex whole. If one or more parts of system are not present, system will be imperfect, or may even be unable to work[11]. If system theory logic in tune with broadcasting system, that broadcasting is a system, then effort to advance broadcasting, let alone change paradigm from analog to digital, is very difficult to do if it only changes one or two parts, for example, regulations on migration acceleration of analog to digital television broadcasts and analog switch off as mandated in Job Creation Law.

The existence of Article 72 in Job Creation Law is very positive in encouraging migration acceleration of analog to digital television broadcasts and analog switch offs and in accordance with spirit of its birth as an "emergency" door. The law is only a basis and becomes an entry point, meanwhile to realize migration of analog to digital television broadcasts and analog switch offs, completed regulation more is needed to regulate readiness of broadcasting infrastructure and superstructure. Broadcasting digitalization refers to Budiman [12], which is marked by migration use of analog broadcasting technology to digital technology requires legal certainty in form of a law, considering that radio frequency spectrum is a limited resource whose use is intended for welfare of public.

Government regulation, moreover, Ministerial Regulation may not be sufficient to regulate a complex broadcasting system as a whole, one of which is existence regulation of KPI and KPID which are independent state institutions established by Broadcasting Law. In this context, even though there is a Job Creation Law, it does not mean that Broadcasting Bill of revision of Law 32 of 2002 must be stopped. On the contrary, with basic spirit of Job Creation Law, spirit of ratifying Broadcasting Bill to become a new Broadcasting Law must immediately adapt and synchronize with articles in Job Creation Law. Due to length and complexity of digitalization regulatory journey, [13]once identified that only way out that can provide legal certainty and legality in digitization is revision of Law 32 of 2002.

Even though it is "funny", this is one way out that can be done for migration of analog television broadcasts to digital and analog switch off November 2022 can be

realized. In fact, from a logical point of view, Job Creation Law does not cut off articles that in fact separate a certain part of a system that is already an inseparable unit. Especially for laws that are currently being revised, especially since there is already a bill; already entered into National Legislation Program, Job Creation Law must be a "tool of coercion" for Legislature to immediately into a Law.\

Conclusion

Based on description above, can concluded as follows:

1. The entry of content migration of terrestrial television broadcasts from analog to digital and analog switch off, in Article 72 of Law no. 11 of 2020 about Job Creation by adding Article 60A to Law No. 32 of 2002 about Broadcasting shows commitment of Indonesia Government to accelerate development of broadcasting sector as well as indicates that national broadcasting conditions have not contributed much to national economic growth. Paradigm shift of broadcasting platform through Job Creation Law which is perceived as an "emergency" Law is in line with steps to revise Broadcasting Law whose draft law has been included in DPR RI Prolegnas since 2009;
2. The implementation of migration of analog to digital television broadcasts and analog switch offs that must have been realized in November 2022 is not sufficient only armed with legal umbrella of Law No. 11 of 2020 about Job Creation, but Government must prepare a complete regulation providing a legal basis for availability preparation of broadcasting infrastructure and infrastructure which is an integral part of broadcasting system and is inseparable. The most likely regulation for complete content and can be stipulated in a short time is by enacting Draft Law on Broadcasting a revision of Law No. 32 of 2002 concerning Broadcasting which has been included in program since 2009 with adaptation and synchronization of Job Creation Law.

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