

## COMMUNITY PREPAREDNESS IN WELCOME TO THE DIGITALIZATION OF TELEVISION BROADCASTING IN WEST JAVA

<sup>1</sup>H. Muchsin al-Fikri, <sup>2</sup>Witri Cahyati, <sup>3</sup>Pupi Indriati Zaelani, <sup>4</sup>Destiana Angelita

<sup>1,2,3,4</sup> FISIP Universitas Sangga Buana Bandung

Author's Email : muchsinalfikri2020@gmail.com

### Abstract

*Indonesia is one of the countries that are late in applying the digitization of television broadcasting. Migration from analog TV system to digital TV has encountered many obstacles and obstacles that are not simple. In accordance with Law number 11/2020, the time limit for stopping analog TV broadcasts or commonly called ASO (Analog Switch Off) is until November 2, 2022. ASO has been stated in Law No. 11 of 2020 concerning Job Creation, that the termination of analog terrestrial television broadcasts and switch to digital data no later than two years after the regulation is enacted. However, because our country was hit by the storm of the Covid-19 pandemic, the ASO policy underwent a schedule change. But the big question is are people ready to face the policy of digitizing television broadcasting? After the Covid-19 pandemic storm, people still have to struggle to rebuild an economy that has been destroyed and slumped by the impact of Covid. This paper will elaborate and measure the community's readiness to face the digitalization of television broadcasting in the form of Analog Switch Off in West Java. This province is interesting to study considering the largest population in Indonesia. Using a qualitative method with a case study approach, the researcher conducted observations and in-depth interviews with a number of key informants such as the Chair of the West Java KPID, Kominfo officials and broadcasting practitioners.*

**Keywords :** *Digitization, Broadcasting, Analog Switch Off, Digital Switch On*

### 1. INTRODUCTION

Meeting of several Asean countries at The 4th Asean Senior Officials Meeting on Asean Broadcasting in Bangkok On 20-21 September 2018 has committed to carry out the Analogue Switch Off (ASO). Although currently the implementation status in each ASEAN country is still different, there is a general agreement that Asean will work towards achieving ASO in 2020.

Indonesia is one of the countries that is late in implementing the agreement, because based on the agreement of the International Telecommunication Union (ITU) in Geneva in 2006, all member countries are targeted to have completely stopped analog TV broadcasts on July 17, 2015. It seems that we have a lot to learn from Korea. South, Brunei and Singapore which have successfully carried out broadcasting digitization according to the agreed schedule.

After being held hostage for a long time by complicated and convoluted legislative revisions, the DPR RI has finally succeeded in passing the Job Creation Law which mandates that the implementation of ASO must be carried out no later than 2 November 2022. The determination of the ASO will have a tremendous impact, especially in saving 700 MHz frequency band as a very ideal frequency for national digital transformation.

Our country is not only still struggling in the transition process from analog broadcasting to digital broadcasting or Digital Terrestrial Television Broadcasting (DTTB), it is also still faced with the issue of community readiness after being hit by the COVID-19 pandemic which has devastated the community's economy.

According to data from the Ministry of Communication and Informatics, it is stated that there will be 44.5 million households throughout Indonesia who will be affected by the lethal injection of analog TV or ASO. That is not an easy challenge for the government. In addition, analog tv migration will also involve around 701 analog terrestrial television broadcasters.

The people of West Java, which number 50 million, are among those who will be affected by this policy. Are the people of West Java ready to face this ASO policy? The government must pay close attention to the readiness of this community, because if it is forced in the midst of the unpreparedness of the community, it will only add to the complexity of the problem.

This paper will elaborate on the readiness of the people of West Java in welcoming the ASO movement.

## **2. LITERATURE REVIEW**

Furthermore, there are several definitions that describe the meaning of digitization. One of them is the definition from the academic side according to Brennen and Kries. Both define digitalization as digital communication and the impact of digital media on contemporary social life.

Then, according to Gartner.com's dictionary of terms defines, digitization as "the use of digital technology to transform a business model and provide new revenue and value-generating opportunities; it is a process of moving to a digital business."

And in fact, the digitization process cannot occur without digitization. Digitization is the use of digital technology and digitized data, to influence the way work is done, change the way company-customers interact, and create new (digital) revenue streams.

The transition from analog television sets to digital television sets requires the replacement of television transmitting and receiving television sets. In order to receive digital broadcasting, a digital TV set is required.

However, if you want to keep using analog television receivers, digital broadcasts can be captured with an additional device called a converter circuit (Set Top Box). The digital broadcast signal is converted by a converter circuit into an analog signal, so users of analog television receivers can still enjoy digital television broadcasts. In this way, we will slowly switch to digital TV broadcasting technology without being interrupted by the broadcast service that has been used so far.

The transition process that runs slowly can minimize the risk of losses, especially those faced by television operators and the public. These risks include information about broadcast programs and additional devices that must be installed. Before people were able to change their analog television to digital television, people received analog broadcasts from television transmitters that broadcast digital television broadcasts.

## **3. RESEARCH METHODS**

By using a qualitative method, the author takes a descriptive analytical approach by optimizing primary and secondary data in the form of library research and in-depth interviews with several competent informants and observers in the broadcasting world, such as Kominfo and the Chair of the West Java KPID.

## **4. RESULTS AND DISCUSSION**

For television operators, the risk of loss comes from the cost of building terrestrial digital television infrastructure which is relatively much more expensive than building analog

television infrastructure. Television operators can take advantage of the broadcasting infrastructure that has been built so far, such as studios, buildings, human resources and so on.

If the television operator can apply the work pattern with the prospective digital TV operator. The application of work patterns with prospective digital providers will ultimately prevent television operators from being exposed to excessive risks. In the future, digital television broadcasting providers can be divided into two positions, namely being a network provider, as well as a content provider.

Television sets with only analog tuners cannot decode digital transmissions. When analog broadcasting over the air stops, users of sets with analog-only tuners can use programming sources (eg cables, recorders) or can purchase set-top box converters to listen to digital signals. In the United States, government sponsored coupons are available to offset the cost of an external converter box. The off-analog switch (full station power) took place on June 12, 2009 in the United States, July 24, 2011 in Japan, August 31, 2011 in Canada, February 13, 2012 in Arab Countries, and is scheduled for October 24, 2012 in the United Kingdom and Ireland. , in 2013 in Australia, in 2015 in the Philippines and Uruguay, in 2017 in Costa Rica and on 2 January 2019 in Singapore.

Broadcasts using a digital system are tamper-resistant and easy to correct for the digital code via error-correction codes. The result is a much more accurate and high-resolution picture and sound quality than analog television broadcasts. In addition, digital television broadcasts can use low power.

Transmission on Digital TV uses a more efficient bandwidth so that channels can be condensed. Digital TV broadcasting systems use OFDM which is robust in heavy traffic. The transition from analog technology to digital technology has the consequence of providing more television broadcasting channels. Broadcasting with digital technology that does not allow for limited frequency has resulted in new television channels. Digital television operators act as operators of digital television network operators while broadcast programs are provided by other operators. The form of the implementation of the digital television broadcasting system has changed in terms of channel utilization or service technology. There is an efficiency in the use of frequency channels in the form of using one frequency channel for 4 to 6 programs.

Terrestrial digital television broadcasts can be received by analog television reception systems and mobile television reception systems. Digital TV has interactive functions where users can use it like the internet. The DVB digital television broadcast system has the ability to utilize the return path between the IRD and the operator through the Subscriber Management System module. The line requires a modem, telephone network or cable television return line, or satellite to send a signal back to the user as in the application of counting votes via television. Several specifications have been developed, including through the fixed telephone network (PSTN) and the integrated digital service network (ISDN). In addition, comprehensive solutions were developed for interaction via CATV, HFC, terrestrial systems, SMATV, LDMS, VSAT, DECT, and GSM networks.

Discontinuation of analog broadcasting (English: analog switch-off, abbreviated ASO), also known as digital television transition, transition to digital broadcasting, television digitization or digital migration is a process in which analog television broadcasting technology is converted to and replaced by digital television. Carried out by each country on a different schedule, involving primarily the conversion of analog terrestrial television broadcasting infrastructure to digital terrestrial (DTT), the main benefits of which are additional frequencies on the radio spectrum and lower broadcast costs, as well as better viewing quality for consumers.

The switch may also involve converting analog cable television to digital cable or internet protocol television, as well as analog to digital satellite television. The shift to land-based broadcasting was initiated by several countries around 2000. On the other hand, the transition

to satellite television systems is well underway or completed in many countries at this time. This is an involved process because the analog television receiver owned by the viewer cannot receive digital broadcasts; the viewer must purchase a new digital TV, or a converter box that converts the digital signal to an analog signal or other form of digital signal (eg HDMI) that can be received on the old TV. Usually during the transition period, a live broadcast service is operated wherein the broadcast is available to viewers in both analog and digital at the same time. With the increasing popularity of digital, it is hoped that existing analog services will be eliminated. In many places, this is already the case, with broadcasters offering viewers incentives to encourage them to go digital. Government intervention usually involves providing funding to broadcasters and, in some cases, monetary assistance to viewers, to allow the switch to occur at certain deadlines. In addition, the government can also speak with broadcasters about what digital standards should be adopted - whether DVB-T, ATSC, ISDB-T, or DTMB. Governments can also require all receiving equipment sold in a country to support the required digital 'tuner'.

Prior to digital television, PAL and NTSC were used for video processing within TV stations and for broadcasting to viewers. Therefore, the transition process may also include the adoption of digital equipment using a serial digital interface (SDI) in TV stations, replacing PAL or NTSC or composite analog component video equipment. Digital broadcasting standards are only used to broadcast videos to viewers; Digital TV stations typically use SDI regardless of broadcasting standards, although it's possible that stations still using analog equipment may convert their signal to digital before broadcasting, or for stations that use digital equipment but convert the signal to analog for broadcasting, or they may have a mix of digital equipment and analogues. Digital TV signals require less transmitting power to broadcast satisfactorily.

The transition process is being carried out on different schedules in different countries; in some countries this is implemented gradually as in Australia, India or Mexico, where each region has a separate date for deactivation. In other countries, the entire country switches on one date, such as the Netherlands. On August 3, 2003, Berlin became the first city in the world to turn off terrestrial analog signals. Luxembourg was the first country to complete a terrestrial transition, in September 2006. In Indonesia, the government plans to phase out all analog broadcasts, with the final stage on 2 November 2022 in accordance with Law no. 11 of 2020 concerning Job Creation.

### **West Java Community Readiness**

There are groups who are very interested in this policy, firstly broadcasters as subjects, actors and broadcasters who produce broadcasts on television. Second, the audience who enjoy the results of the broadcast. One of the public broadcasting institutions that will be affected is TVRI. Member of Commission I DPR RI, Bobby Adhityo Rizaldi, had criticized the readiness of West Java TVRI regarding Analog Switch Off (ASO) and the transition to digital broadcasting, because there will be more channels and content on digital broadcasts. He emphasized that community readiness needs to be considered, and the percentage of the population in West Java who already has digital television sets and set top boxes (STB) also needs to be studied more deeply. He also asked how far West Java TVRI was involved in the Digitalization Broadcasting System (DBS) project and the distribution of set top boxes by the Ministry of Communication and Information (Kemenkominfo).

The migration of analog transmitters to digital broadcasts also requires the construction of additional transmitters to cover the entire West Java region.

On that occasion, Head of West Java Province TVRI Station Asep Suhendar stated the readiness of the TVRI Public Broadcasting Institution and a number of private TV stations for digital broadcasts in West Java in 2022. "We have 14 transmission units or transmitters in West Java. A number of transmissions have even provided digital terrestrial television broadcasts for a

number of broadcast areas, even since 2010 they have broadcast dualcast, analog and digital," he explained.

Asep explained, the number of transmissions belonging to TVRI in West Java that have broadcast digital television broadcasts continues to grow, including transmitters in Mount Malang since 2020, for broadcast areas including Subang, Karawang, Pamanukan, Indramayu, Losarang and Sumber Cirebon. "Transmitters at Mount Tela Bogor have also switched off analogue starting this year, covering Bogor Regency, Bogor City, Depok, Bekasi, Cibinong and Ciawi," he concluded.

The Ministry of Communications and Informatics has indeed made a program to provide STB to underprivileged communities in government regulations and ministerial regulations, as a strong commitment of the government to encourage ASO policies in the future. By adding an STB device, it is hoped that the wider audience will be able to enjoy a wide selection of digital television broadcast content

The provision of the STB has been contained in a Government Regulation and a Regulation of the Minister of Communication and Informatics. The allocation of the free STB was from the digital TV multiplexing provider (MUX), as a form of commitment by the MUX organizer after winning the MUX selection for digital TV broadcasts in 22 regions.

Based on data from the Central Statistics Agency (BPS), it is estimated that there are 6.8 million poor families. However, the plan is that this STB will only be given to poor families who already have a television.

For STB, currently there are at least nine brands that have been certified and support digital TV broadcasting in Indonesia. A number of digital TV STBs that have been certified are easy to find and buy through a number of online marketplaces with varying prices. Digital TV STB prices start from IDR 210,000 to over IDR 500,000. A relatively affordable price for a family who wants to enjoy digital TV broadcasts. Even analog TV owners do not need to replace their TV sets. However, in several surveys conducted by several associations, data was obtained that there are still many people in West Java who do not understand and understand this digital tv migration plan. So it still needs more massive socialization.

In the FGD Activity "Considering ASO Preparation in West Java" organized by KPID West Java and Fikom Unpad at the UNPAD Campus, Tuesday 25 May 2021, Eris Munandar emphasized that the West Java community is very adaptive to technological changes, so it is related to the move of analog TV to Terrestrial Digital TV is not a difficult thing for the people of West Java to do.

Eris Munandar, added that in order for the implementation of this technology transition to take place well, there must be synergy between all components, including industry, government and the campus world.

In relation to the socialization of digital TV, Eris asked all parties to do it more massively and in a more structured way with language that is easily understood by all people in West Java. So that since the beginning people have started to switch to digital TV.

Then with regard to the set top box / decoder, the General Chairperson of ATSDI asked the Government in this case the Ministry of Communication and Information to immediately request the commitment of mux organizers in West Java to immediately distribute set top boxes to underprivileged residents. According to the records he got, more than 450 thousand set top boxes will be distributed in the West Java region due to the commitment of the mux organizers in West Java.

One of the most important things according to Eris, the Analog Switch Off is not just a matter of technology transfer, but has a tremendous impact that can be felt by the community, such as the community will get faster internet services due to the efficiency of this migration process.

In this FGD opportunity, Eris believes that the process of discontinuing analog TV in West

Java will proceed well, as can be seen from the readiness of the West Java KPID which collaborates with various components to participate in the successful implementation of this Analog switch off.

## **CONCLUSION**

The Indonesian government is required to immediately implement the broadcasting digitization policy as agreed by several countries. The government has set September 2022 as the deadline for the migration of analog television to digital. As for the readiness aspect of the people of West Java, the government is expected to immediately distribute STB for the poor and affected by the COVID-19 pandemic. In facing this change, West Java residents are considered to have readiness.

## **REFERENCES**

- Abdullah, A. (2018). Analisis Pola Kebijakan Digitalisasi Penyiaran di Indonesia [Laporan Penelitian]. Pekanbaru: Penelitian ini didanai oleh Kementerian Agama Republik Indonesia melalui Lembaga Penelitian dan Pengabdian kepada Masyarakat (LPPM) Universitas Islam Negeri Sultan Syarif Kasim Riau.
- Arifianto, S. (2008). Metodologi Riset Komunikasi: Panduan Untuk Melaksanakan Penelitian Komunikasi. Yogyakarta: BPPI & PKMBP.
- ATSDI. (2017). Masukan Asosiasi Televisi Siaran Digital Indonesia (ATSDI) Kepada Badan Legislasi (Baleg) DPR-RI Terkait Harmonisasi RUU Penyiaran Inisiatif DPR, Jakarta, 13 April 2017. Jakarta: Asosiasi Televisi Siaran Digital Indonesia (ATSDI).
- Baker, C. E. (2006). Media Concentration and Democracy: Why Ownership Matters. Cambridge University Press.
- Bungin, M. B. (2008). Penelitian Kualitatif, Komunikasi, Ekonomi, Kebijakan Publik, dan Ilmu Sosial lainnya. Jakarta: Kencana.
- ITU. (2013). Roadmap for the transition from analogue to digital terrestrial television broadcasting in the Republic of Indonesia. Retrieved from International Telecommunication Union website: [https://www.itu.int/net4/ITU-D/CDS/gq/generic/asp-reference/file\\_download.asp?FileID=4380](https://www.itu.int/net4/ITU-D/CDS/gq/generic/asp-reference/file_download.asp?FileID=4380)
- Kominfo RI. (2014). Keuntungan Penyiaran Digital. Retrieved from [https://tvdigital.kominfo.go.id/wp-content/uploads/2014/08/manfaat\\_penyiaran.pdf](https://tvdigital.kominfo.go.id/wp-content/uploads/2014/08/manfaat_penyiaran.pdf)
- Kominfo RI. (2018). Laporan Kinerja 2017. Retrieved from Kementerian Komunikasi dan Informatika Republik Indonesia website: <https://web.kominfo.go.id/sites/default/files/FINAL%20FA%20LAKIP%20KOMINFO%202017.pdf>
- TVDigital.id. (2018). Efisiensi spektrum. Retrieved January 20, 2019, from TVDigital.id website: <http://tvdigital.id/efisiensi-spektrum/>