AYO KERJA

MARI

MELAYANI

DENGAN

PROAKTIF

Profesional - Akuntabel - Integritas - Inovatif
The development and advancement of Information and Communication Technology (ICT) has penetrated every walk of our life. In fact, Information and Communication Technology (ICT) has become an integral part of people’s life. The rapid development of technology has put a new face to Indonesian economy, by transforming its conventional economy to digital economy.

In order to strengthen Indonesia’s digital economy, the Ministry of Communications and Informatics (MCI) focuses on the development of infrastructures to fulfill its role in providing equal access to information in all regions in Indonesia. For the border areas in particular, the Ministry provides support to their startups, Micro Businesses, Small and Medium Enterprises (SMEs), farmers, and fishermen in efforts to increase their welfare by the use of ICT.

The digital era has also brought change in the licensing system. In this area, the Ministry of Communications and Informatics becomes the leading sector by putting forward fast, easy, and transparent service, through the one-stop integrated service (PTSP), registration of electronic system operators (PSE), and licensing in the area of Telecommunications.

The Ministry of Communications and Informatics plays the role of not only the regulator but also facilitator for the implementation of programs outlined in this Ministry of Communications and Informatics Annual Report 2017. It is expected that this report would serve its best at providing beneficial source of information for every party.

We hope that the Ministry of Communication and Informatics would maintain its commitment to put forward programs which have immediate benefits for the people as well as promote those of informatics society empowerment programs.

On behalf of the Minister of Communications and Informatics
Jakarta, July 2018

Secretary General of the
Ministry of Communications and Informatics

Farida Dwi Cahyarini
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PROFILE

AHMAD M. RAMLI  
Director General of Posts and Informatics Operations

ISMAIL  
Director General of Resources Management and Equipment of Posts and Informatics

BASUKI YUSUF ISKANDAR  
Head of the Agency for Human Resources Development and Research on Communications and Informatics

SEMUEL ABRIJANI PANGERAPAN  
Director General of Informatics Applications

IVAN SANTOSO  
Acting Inspector General
## Awards received by Ministry of Communications and Informatics in 2017

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<tr>
<th>NO</th>
<th>AWARD</th>
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<tr>
<td>1</td>
<td>Award given by the Ministry of Finance to the Ministry of Communications and Informatics for its success in formulating and presenting Financial Report 2016 with highest standard achievement</td>
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<tr>
<td>2</td>
<td>Award given by the Ministry of Finance to the Ministry of Communications and Informatics as Ministries/Institutions with the highest contribution to non-tax state revenue (PNBP) to National State Budget (APBN) 2016</td>
</tr>
<tr>
<td>3</td>
<td>Award given by the Ministry of Finance to the Ministry of Communications and Informatics for the second best Ministries/Institutions to manage PNBP within the Revenue Group of above 1 trillion rupiah</td>
</tr>
<tr>
<td>4</td>
<td>Award given by the Ministry of Finance to the Ministry of Communications and Informatics for the Best Category of Government Contracting Agency (PJPK) with Business Entities with the fastest transaction process.</td>
</tr>
<tr>
<td>5</td>
<td>Award from the Ministry of Home Affairs for the Ministry of Communications and Informatics for a national-scale policy with wide effect towards the increased quality of citizenship data and document for the category of “DUKCAPIL SELARAS”</td>
</tr>
<tr>
<td>6</td>
<td>Award from the Ministry of Transportation for the Ministry of Communications and Informatics for providing full and active support towards the provision of Lebaran transportation 2017</td>
</tr>
<tr>
<td>7</td>
<td>Award from the presidential working unit for the implementation of the state ideology of Pancasila (UKP-PIP) for the Ministry of Communications and Informatics for its positive performance in the security, control and smooth organization of the Lebaran agenda 2017, on Idul Fitri 1438H</td>
</tr>
<tr>
<td>8</td>
<td>Award from the National Law Development Agency for Ministry of Communications and Informatics’ Head of the Bureau of Legal Affairs for the cooperation and active role in fostering and developing Legal Documentation and Information network (JDIH) in the Ministry of Communications and Informatics in accordance with 6 (six) aspects of JDIH in the framework of realizing a legal information integrated system.</td>
</tr>
<tr>
<td>9</td>
<td>Award from the Minister of Health for the Minister of Communications and Informatics for its participation and support in the development program in the field of health</td>
</tr>
<tr>
<td>10</td>
<td>Award from the State Administration Institute for the Minister of Communications and Informatics for its participation in the “Policy Analysis Utilization” survey</td>
</tr>
<tr>
<td>11</td>
<td>Award from ITECH to Ministry of Communications and Informatics’ Directorate General of Resources Management and Equipment of Posts and Informatics as TOP IT implementation on Ministry 2017</td>
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<td>Award from the Chief of The National Polices Criminal Investigation Department (Kabareskrim) for civil servant investigators (PPNS) for their active role</td>
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Highlight of Financial Report

MCI received the
Unqualified Opinion (WTP)
in 2017

Realization of Ministry of Communications and Informatics’ expenditure in budget year 2017 was

Rp. 4,409,473,919,346,-

from the self-blocking Budget Implementation List (DIPA) ceiling of

Rp. 4,951,278,581,000,-

In 2017, the Ministry of Finance issued Presidential Instruction Number 4 of 2017 on the Budget Efficiency Measures in Ministries/Institutions Expenditures on Goods in the Implementation of the 2017 State Budget.

During which period the Ministry of Communications and Informatics received a cut of

Rp. 100,000,000,000,-

and within the same period received additional budget for Government Public Relations program of

Rp. 250,000,000,000,-
The detail realization of Expenditures for each program is laid out as follows:

<table>
<thead>
<tr>
<th>Program Description</th>
<th>Budget</th>
<th>Realization</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Management and implementation of MCI's other technical tasks Supporting program</td>
<td>269,027,744,000.00</td>
<td>287,938,009,469.00</td>
<td>97.27%</td>
</tr>
<tr>
<td>MCI Apparatus infrastructure and facilities development Program</td>
<td>500,000,000.00</td>
<td>462,154,100.00</td>
<td>92.43%</td>
</tr>
<tr>
<td>Management and implementation of MCI's other technical tasks Supporting program</td>
<td>269,027,744,000.00</td>
<td>287,938,009,469.00</td>
<td>97.27%</td>
</tr>
<tr>
<td>MCI Apparatus accountability development and monitoring program</td>
<td>24,409,497,000.00</td>
<td>22,087,030,023.00</td>
<td>90.49%</td>
</tr>
<tr>
<td>Communications and informatics research and development program</td>
<td>246,005,068,000.00</td>
<td>234,963,182,466.00</td>
<td>95.51%</td>
</tr>
<tr>
<td>Posts and informatics resource and equipment management program</td>
<td>768,727,418,000.00</td>
<td>699,297,737,853.00</td>
<td>90.97%</td>
</tr>
<tr>
<td>Posts and informatics operations program</td>
<td>2,846,293,020,000.00</td>
<td>2,465,335,948,413.00</td>
<td>86.62%</td>
</tr>
<tr>
<td>Informatics application development program</td>
<td>364,593,660,000.00</td>
<td>324,995,725,488.00</td>
<td>89.14%</td>
</tr>
<tr>
<td>Public information and communications development program</td>
<td>404,722,174,000.00</td>
<td>374,394,131,534.00</td>
<td>92.51%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4,951,278,581,000.00</strong></td>
<td><strong>4,409,473,919,346.00</strong></td>
<td><strong>89.06%</strong></td>
</tr>
</tbody>
</table>

*Source: Bureau of finance, MCI, 2017*
Graphic 1 Comparison of MCI expenditure realization between 2014 and 2017
National State Budget and Realization (in billion rupiah)

2014
- Ceiling: 3,663
- Realization: 2,127
- % Realization: 58.07%

2015
- Ceiling: 4,939
- Realization: 2,672
- % Realization: 54.10%

2016
- Ceiling: 5,121
- Realization: 3,583
- % Realization: 69.95%

2017
- Ceiling: 4,951
- Realization: 4,410
- % Realization: 89.06%

Source: Bureau of finance, MCI, 2017

Graphic 2 achievement of non-tax state revenue (PNBP) target 2012-2017

2012
- Frequency Usage Right Fee: 660
- Telecommunications Usage Right Fee: 1,743
- PNBP USO: 123
- Other PNBP*: 660

2013
- Frequency Usage Right Fee: 740
- Telecommunications Usage Right Fee: 1,945
- PNBP USO: 125
- Other PNBP*: 740

2014
- Frequency Usage Right Fee: 787
- Telecommunications Usage Right Fee: 2,359
- PNBP USO: 122
- Other PNBP*: 787

2015
- Frequency Usage Right Fee: 962
- Telecommunications Usage Right Fee: 2,760
- PNBP USO: 138
- Other PNBP*: 962

2016
- Frequency Usage Right Fee: 984
- Telecommunications Usage Right Fee: 3,209
- PNBP USO: 224
- Other PNBP*: 984

2017
- Frequency Usage Right Fee: 967
- Telecommunications Usage Right Fee: 3,318
- PNBP USO: 273
- Other PNBP*: 967

Source: Bureau of finance, MCI, 2017
Other PNBP includes among other: equipment certification fee, official housing rental, radio amateur license (IAR), citizen radio communication (KRAP), Electronica Radio and Radio Operator (REOR), Radio operator proficiency certification (SKOR), posts operations license, broadcasting operations license, Yogyakarta Institute of Multi-media (STMM), employee center for education and training, state asset usage, and other revenues.

Realization of PNBP per December 2017

<table>
<thead>
<tr>
<th>Year</th>
<th>Frequency Usage Right Fee</th>
<th>PNBP USD</th>
<th>Telecommunications Usage Right Fee</th>
<th>Other PNBP</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td>1,497</td>
<td>599</td>
<td>123</td>
<td>11,098</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,743</td>
<td>660</td>
<td></td>
<td>11,583</td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td>2,020</td>
<td>650</td>
<td>125</td>
<td>12,251</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1,945</td>
<td>740</td>
<td></td>
<td>13,671</td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td>2,291</td>
<td>734</td>
<td>94</td>
<td>13,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,309</td>
<td>787</td>
<td></td>
<td>15,937</td>
</tr>
<tr>
<td>2015</td>
<td></td>
<td>2,239</td>
<td>893</td>
<td>100</td>
<td>14,613</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,760</td>
<td>962</td>
<td></td>
<td>17,420</td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td>2,567</td>
<td>923</td>
<td>107</td>
<td>16,567</td>
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<tr>
<td></td>
<td></td>
<td>3,209</td>
<td>984</td>
<td></td>
<td>18,102</td>
</tr>
<tr>
<td>2017</td>
<td></td>
<td>2,567</td>
<td>932</td>
<td>120</td>
<td>16,567</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3,318</td>
<td>967</td>
<td></td>
<td>21,119</td>
</tr>
</tbody>
</table>

Other PNBP includes among other: equipment certification fee, official housing rental, radio amateur license (IAR), citizen radio communication (KRAP), Electronica Radio and Radio Operator (REOR), Radio operator proficiency certification (SKOR), posts operations license, broadcasting operations license, Yogyakarta Institute of Multi-media (STMM), employee center for education and training, state asset usage, and other revenues.

Realization of PNBP per December 2017
“Palapa Ring Unites Indonesia”

is a government’s effort in building the availability of fiber optic network services that connect all municipalities/cities in Indonesia.
CHAPTER 1
PERFORMANCE 2017
AT A GLANCE
A. Performance of Ministry of Telecommunication and Informatics (MCI)

1. Policies

a) Prepaid SIM Card Registration

The increased number of fraud cases through sms or phone has encouraged the Ministry of Communications and Informatics to improve the regulation on telecommunication subscriber registration and initiate the prepaid SIM Card Registration program utilizing population database of Resident Identity Card Number and Family Card Number (KK) for validation of prospective subscriber data.

Prepaid SIM card Registration program was carried out from

31 OCTOBER 2017 to 28 FEBRUARY 2018

Up to

DECEMBER 2017 MOUNT

a total of users have successfully registered their prepaid SIM card

131,401,651

with details as follows:

<table>
<thead>
<tr>
<th>Operator</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telkomsel</td>
<td>63,762,706</td>
</tr>
<tr>
<td>Indosat</td>
<td>36,958,186</td>
</tr>
<tr>
<td>XL</td>
<td>20,208,183</td>
</tr>
<tr>
<td>H3I</td>
<td>8,031,165</td>
</tr>
<tr>
<td>Smartfren</td>
<td>2,020,365</td>
</tr>
<tr>
<td>STI</td>
<td>7,691</td>
</tr>
</tbody>
</table>

Source: Material from the House of Representative's meeting dated 22 January 2018
The benefits of prepaid SIM card registration include:

1. Regulating cellular subscriber data in accordance with the citizenship database
2. Preventing crimes such as fraud and spam
3. Preventing terrorism
4. Tackling fake news
5. Facilitating transactions process in the economic sector including providing ease of aid distribution for the less fortunate
6. Encouraging non-cash transactions through banks in order to be more secure and inclusive
b) Digitalization of Television Broadcasting (Analog Switch-Off)

One of the measures that has to be taken is to improve the quality of internet and mobile broadband. Considering the frequencies availability in Indonesia, the implementation of mobile broadband enhancements requires special initiatives such as digital terrestrial TV and Analogue Switch Off (“ASO”) that serve to provide space frequency through frequency spectrum release as a result of terrestrial TV digitalization process (Digital Dividend). With the Digitalization of Television Broadcasting program, it is expected that there will be more efficient allocation of frequency, so that there is sufficient space to develop technology for mobile broadband and to reach the foremost, outermost, and lagging regions (“3T”). Thus, Indonesia can enjoy substantial economic benefits.

There are 5 (five) main components of the implementation of broadcasting digitalization/Analog Switch Off (ASO), namely: (1) Legal Basis, (2) Infrastructure and Frequency Management, (3) Broadcasting Industry Operation, (4) Dissemination, and (5) Digital Dividend Realization, as illustrated in Figure 1.1 below. The implementation of the five main components is done in parallel.
Legal Basis

To realize Analog Switch Off (ASO) in Broadcasting field, the Government stipulated Broadcasting Law Number 32 of 2002 as its legal basis. This law was to replace Law Number 24 of 1997 as a consequence of the emergence of local televisions and community radios in Indonesia. Law Number 32 of 2002 has a mission to reform broadcasting industry operation from centralization to decentralization. Centralization violates the principle of broadcasting democratization which is attempted to be introduced by the Broadcasting Law.

Bill of amendment to Law number 32 of 2002 on Broadcasting is a national legalization program initiated by the Indonesian House of Representatives.

There are 4 (four) main points behind the revision of the Broadcasting Law, namely:

01 Globalization

02 Reaffirmation to avoid multi-interpretation

03 New authority

04 Technology Developments
Infrastructure and Frequency Management

To support the expansion of digital TV broadcast coverage and to support LPP TVRI in its effort to strengthen broadcast quality as well as screen display through digital broadcasting.

**EXPECTATION FOR 2019:**

- **78%** DIGITAL BROADCAST COVERAGE
- **88%** POPULATION COVERAGE

**MCI ASSISTED LPP TVRI TO PROVIDE**

**42 TRANSMITTERS**

**Source:** Directorate of Broadband, Directorate General of Post and Informatics, MCI, 2017

**Figure 1.2 Map of Lpp TVRI’s 42 Digital Transmitter Sites**

* ITTS II Digital Transmitter
** 3T Digital Transmitter (USO)
Digital TV broadcasting trial gets underway and is participated in by Private Broadcasting Institution (LPS) Content Providers in 12 cities (service areas), namely Jakarta, Bogor, Depok, Tangerang, Bekasi, Bandung, Yogyakarta, Medan, Batam, Surabaya, Semarang, Denpasar, Palembang and Makassar. LPP TVRI is also ready to conduct Digital TV broadcasting trial in 42 service areas (table of service area attached). Broadcast coverage map and trial location of Digital TV Broadcasting can be seen in Figure 1.3 below.

Figure 1.3 Map of Broadcast Coverage and Digital TV Broadcasting Trial

Source: Directorate of Broadcasting, Directorate General of Posts and Informatics, MCI, 2017

Phase III Digital TV Trial
(9 June 2017 to 9 June 2018)

Content Providers which have conducted Digital TV Broadcasting Trial through TVRI Mux:
- Number of Service Areas: 12
- Number of Content Providers: 39

Regulation of the Minister of Communications and Informatics Number 5 of 2016 on the Trial of Telecommunication, Informatics and Broadcasting Technology

Decree of the Minister of Communications and Informatics Number 1227 of 2017 on the Trial of Terrestrial Digital Television Broadcasting

The trial agreement between LPP TVRI and Private Broadcasting Institution (LPS) Content Provider is set forth in a Memorandum of Understanding (MoU) and Cooperation Agreements.

A total of 39 Private Broadcasting Institution (LPS) Content Providers have participated in the Phase III Digital TV Broadcasting trial and have gone on air in their respective service area. The trial was conducted with LPP TVRI as multiplexer provider.

Trial Participants
Ministry of Communications and Informatics is the main axis in filtering various information, particularly negative content and fake news, spreading in cyberspace. The rapid spread of information is inseparable from its negative impacts. The following is a list of blocked negative sites and negative content as complained by the public.

**Figure 1.4 Complaints on Negative Sites and Termination of Domain/Sites**

### COMPLAINTS ON NEGATIVE SITES THROUGH EMAIL, WHATSAPP, ADUANKONTEN.ID ON TRUST+POSITIVE

**PRIORITY JANUARY 31 DECEMBER 2017**

<table>
<thead>
<tr>
<th>Negative Content</th>
<th>2016 Complaints</th>
<th>2017 Complaints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pornography</td>
<td>6,357</td>
<td>19,778</td>
</tr>
<tr>
<td>Racism</td>
<td></td>
<td>16,742</td>
</tr>
<tr>
<td>Defamation</td>
<td></td>
<td>7,795</td>
</tr>
<tr>
<td>Gambling</td>
<td></td>
<td>7,246</td>
</tr>
<tr>
<td>Fraud</td>
<td></td>
<td>2,950</td>
</tr>
<tr>
<td>Disturbing Content</td>
<td></td>
<td>1,691</td>
</tr>
<tr>
<td>Terrorism/Radicalism</td>
<td></td>
<td>1,586</td>
</tr>
<tr>
<td>Trade of products with certain regulation</td>
<td>800</td>
<td></td>
</tr>
<tr>
<td>Violations of IPR</td>
<td>739</td>
<td></td>
</tr>
<tr>
<td>Negative content recommended by relevant agency</td>
<td>215</td>
<td></td>
</tr>
<tr>
<td>Child abuse</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Information security breaches</td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>Content that violates social and cultural norms</td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>Content that facilitates access to negative content</td>
<td>125</td>
<td></td>
</tr>
<tr>
<td>Separatism/dangerous organization</td>
<td>34</td>
<td></td>
</tr>
</tbody>
</table>

**NUMBER OF TERMINATION OF DOMAIN/SITES ACCESS**

<table>
<thead>
<tr>
<th>Negative Content</th>
<th>2017-Termination of Domain/Sites Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pornography</td>
<td>776,882</td>
</tr>
<tr>
<td>Racism</td>
<td>183</td>
</tr>
<tr>
<td>Fraud</td>
<td>2,868</td>
</tr>
<tr>
<td>Drugs</td>
<td>89</td>
</tr>
<tr>
<td>Gambling</td>
<td>7,443</td>
</tr>
<tr>
<td>Radicalism</td>
<td>202</td>
</tr>
<tr>
<td>Violence</td>
<td>3</td>
</tr>
<tr>
<td>Child abuse</td>
<td>3</td>
</tr>
<tr>
<td>Internet Security</td>
<td>15</td>
</tr>
<tr>
<td>IPR</td>
<td>361</td>
</tr>
<tr>
<td>Normalization</td>
<td>387</td>
</tr>
</tbody>
</table>

*Cumulative sum from previous year

Source: Material from the House of Representative’s meeting dated 22 January 2018
A rise in total public complaints about negative content has encouraged MCI to make a breakthrough in 2017. MCI has conducted preventive and repressive measures as an implementation of Law Number 19 of 2016 on Information and Electronic Transaction, as illustrated in the following programs:

**Figure 1.5 Implementation of Law Number 19 of 2016 on Information and Electronic Transaction**

The Ministry of Communications and Informatics has operated a negative content crawling machine as a way to detect negative and inappropriate content on the internet such as pornography and block them to prevent form spreading. Negative Content Crawling Machines is operating in Cyber Drone 9 room.
The provision of this machine aims to provide convenience to the public when accessing internet content in Indonesia (safe, reliable, and trustworthy). Government’s effort in mitigating negative content on the Internet is expected to help create a situation that is conducive which in turn will ensure public order. The said negative content refers to Law Number 19 of 2016 amendment to Law Number 11 of 2008 on Information and Electronic Transactions (ITE) Article 2 and Article 40 paragraph (2). Internet users throughout Indonesia as well as agencies/institutions that need assistance in mitigating negative content according to their authority can be benefited from the provision of this machine.
In line with the rapid advancement of the modern era, more people around the world are in need of cellular communications technology, more than ever before. This is also evident in telecommunications technology and mobile communication services development. The development of telecommunication technology, especially in the field of cellular takes place very rapidly due to the need for communication and exchanging data in an immediate, convenient, and portable way.

4G is the acronym for the fourth generation of broadband cellular network Technology, replacing 3G technologies. The official name of 4G technology according to the IEEE (Institute of Electrical and Electronics Engineers) is “3G and beyond. The term 4G is generally used to describe the development of mobile phone technology.
The 4G system provides a comprehensive IP solution whereby voice, data, and multimedia streams can reach users anytime and anywhere, and offers faster data transfer speeds than previous generations. Indonesian people have enjoyed the 4G fast internet service. As of the second quarter of 2017, the construction of 4G BTS in Indonesia has reached 55,701 eNodeB. The number of Indonesian villages covered by 4G sites has reached 12,002 villages out of a total of 83,218 villages throughout the country. The number of Indonesian sub-districts covered by 4G sites has reached 3,394 sub-districts out of a total of 7,175 sub-districts. The number of municipalities/cities in Indonesia covered by 4G sites has reached 481 municipalities/cities out of a total of 514 municipalities/cities. All provinces in Indonesia have been covered by 4G sites.

Figure 1.6 Map of distribution of 4G in Indonesia Year 2017
4G services provided by telecommunication operator as of the third quarter of 2017 (Q3 2017) have reached 331 municipalities/cities out of a total of 514 municipality/cities as shown in Figure 1.7 below.

Figure 1.7 Presence of 4G Services By the Number of Covered Administrative Regions

Source: Cellular Industry Profile 2017, Directorate Of Posts And Informatics Control Of Directorate General of Posts And Informatics Operations, MCI, Third Quarter Of 2017
b) Palapa Ring

The government is well aware that telecommunication operators rarely target remote and border areas for its fast internet services. Therefore the government initiated the Palapa Ring project which later can be utilized by operators to provide fast internet service. Palapa Ring, a national project of fiber optic telecommunication infrastructure development, is aimed at reaching rural areas or villages that have not been covered by fast internet service. In 2018, one of the project packages will be able to operate. With the target to be completed in 2019, it is hoped that there will be no digital divide between one region and another.
Figure 1.8 Map of the Development of National Fiber-Optic Network “Palapa Ring”

**WEST**

- **Network Length**: 2,275 Km
- **Contractor**: PT. Palapa Ring Barat
- **Contract Date**: 29 February 2016
- **Financial Closing**: 11 August 2016
- **Completion of Construction Work**: 11 February 2018
- **Number of Municipalities/Cities**: 5
- **Number of Municipalities/Cities Interconnection**: 7

**CENTRAL**

- **Network Length**: 2,995 Km
- **Contractor**: PT. LEN Telekomunikasi Indonesia
- **Contract Date**: 4 March 2016
- **Financial Closing**: 29 September 2016
- **Completion of Construction Work**: 29 March 2018
- **Number of Municipalities/Cities**: 17
- **Number of Municipalities/Cities Interconnection**: 10

**EAST**

- **Network Length**: 6,878 Km
- **Contractor**: Palapa Timur Telematika
- **Contract Date**: 29 September 2016
- **Financial Closing**: 29 March 2017
- **Completion of Construction Work**: 29 September 2018
- **Number of Municipalities/Cities**: 35
- **Number of Municipalities/Cities Interconnection**: 16

Source: the Telecommunications and Informatics Funding Provision Management Agency (BP3TI), MCI, 2017
The Palapa Ring project is the first government-to-business (public private partnership/PPP) cooperation scheme within Indonesia’s telecommunication sector. The project is divided into 3 (three) packages: West, Central and East, where the government plays a role in providing guarantees to serve nonfinancially feasible regions. It is expected that by 2019, broadband Networks will cover all municipality/cities in Indonesia.

By 2017, the construction of Palapa Ring has reached 89.47% for the West Package, 70.82% for the Central package, and 31.19% for the East package. Below are the progress of Palapa Ring construction in 2017:

Table 1.1 Completion Progress of the Construction of Palapa Ring As of December 2017

<table>
<thead>
<tr>
<th>Description</th>
<th>West Package of Palapa ring</th>
<th>Central Package of Palapa ring</th>
<th>East Package of Palapa ring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network Length</td>
<td>2,275 Km</td>
<td>2,995 Km</td>
<td>6,878 Km</td>
</tr>
<tr>
<td>Contractor</td>
<td>PT. Palapa Ring Barat</td>
<td>PT. LEN Telekomunikasi Indonesia</td>
<td>PT. Palapa Timur Telematika</td>
</tr>
<tr>
<td>Contract Date</td>
<td>29 February 2016</td>
<td>4 March 2016</td>
<td>29 September 2016</td>
</tr>
<tr>
<td>Financial Closing</td>
<td>11 August 2016</td>
<td>29 September 2017</td>
<td>29 March 2017</td>
</tr>
<tr>
<td>Completion of Construction Work</td>
<td>11 February 2018</td>
<td>29 March 2018</td>
<td>29 September 2018</td>
</tr>
<tr>
<td>Number of Municipalities/Cities</td>
<td>5 Municipalities/Cities</td>
<td>17 Municipalities/Cities</td>
<td>35 Municipalities/Cities</td>
</tr>
<tr>
<td>Number of Interconnected Municipalities/Cities</td>
<td>7 Municipalities/Cities</td>
<td>10 Municipalities/Cities</td>
<td>16 Municipalities/Cities</td>
</tr>
<tr>
<td>Overall Progress</td>
<td>89.47%</td>
<td>70.82%</td>
<td>31.19%</td>
</tr>
</tbody>
</table>
Photos of the Palapa Ring
c) Construction of Base Transceiver Station (BTS)

Provision of Base Transceiver Station (BTS) in the 3T Region (the Foremost, Outermost, and Lagging Regions) as well as Border Areas is one of programs within the Universal Service Obligation (USO) implemented by the Ministry of Communications and Informatics through the Telecommunications and Informatics Funding Provision Management Agency (BP3TI). This program is one of MCI/BP3TI’s strategies in narrowing telecommunication gap by providing basic cellular telephony services in areas where mobile signal has yet available. This program is part of the Ministry of Communications and Informatics Strategic Plan Year 2015-2019. In 2017, the provision of BTS has given access for 393 villages to telecommunication.

The objective of Base Transceiver Station (BTS) provision in 3T and Border Areas is to fulfill the State’s obligation to the public in meeting the public’s need for telecommunication and informatics access, as well as strengthening national unity and resilience. This program falls in line with “Nawacita” nine development agenda declared by the President of the Republic of Indonesia point 3, namely to build Indonesia from its periphery and strengthen the rural areas within the framework of a unitary state of Indonesia.
Based on Operations Performance Report and confirmation with mobile cellular telecommunication operators in October 2017, out of 83,218 villages, 22,521 villages are located in 3T region and 60,697 villages are located in non 3T region. Of the 22,521 villages located in the 3T regions, 7,314 still have no telecommunication access; 518 villages with signal strength <50%, and the remaining 6,796 villages receive no signal at all. Of the 60,697 non-3T villages, 1,261 villages still have no telecommunication access¹.

¹Source: Directorate of Posts and Informatics Control of Directorate General of Post and Informatics Operations, 2017
Determination of locations targeted for BTS construction is referring to the locations set forth in the following regulations:


b. Regulation of the Head of National Border Management Authority (BNPP) Number 1 of 2015 on the Master Plan of State Border Management Year (2015-2019); and

Based on Presidential Regulation Number 131 of 2015 on Determination of Disadvantaged Regions 2015-2019, the total villages in the lagging/3T and border areas/prioritized locations are 19,386, where 5,520 of which are categorized as lagging/3T and border areas/prioritized location without signal. For this reason, those 5,520 villages are set to be the priority target of MCI in terms of BTS construction.

Border areas have strategic values for a country in supporting the development. It is also a main manifestation of its territorial sovereignty. Therefore, the Government through MCI is present to overcome the digital divide by expanding the infrastructure of BTS construction, especially in areas categorized as border area based on Regulation of Head of National Border Management Authority (BNPP) Number 1 Year 2015 on the Master Plan of State Border Management Year 2015-2019 which have determined 187 sub-districts as an object of Indonesia's border region management. The provision of telecommunication access services through the provision of BTS has reached 8.02% (15 Subdistricts out of a total of 187 sub-districts in border priority location).
d) Broadband Internet Access

The provision of broadband internet access aims to expand broadband internet accessibility, improve people’s adaptive capabilities to Information and Communication Technology (ICT), reduce digital divide, and increase empowerment of community e-literacy. The targets of the provision of broadband internet access are, among others, the public, communities, central government and local governments at both provincial and regent/municipal levels, and particularly those living in priority areas of the outermost, foremost, and lagging regions, as well as nonfinancially feasible areas.

The provision of internet access is aimed at providing an evenly distributed information network especially in the prioritized public services location such as community health centers (Puskesmas), Schools, Training Centers, Tourist attractions, Productive Centers in underdeveloped villages/3T and border regions. The provision of Internet access in the framework of an even distribution of information is made by the Directorate General of Posts and Informatics Operations through BP3TI by considering the proposals from the Ministries/Institutions. The flow of the proposal of internet access provision are as follow:

- a. Proposal from Ministries/Institutions and Local Governments
- b. Carrying out site readiness assessment
- c. Collecting data on location of internet access provision from other Ministries/Agencies and Local Governments
- d. Verifying internet access proposal
- e. Purchasing the internet access service
### Graphic 1.2 Internet Access Provision

<table>
<thead>
<tr>
<th>Internet Access</th>
<th>At Schools, Community Health Centers, Vocational Training Centers, Public Spaces, Bus Stations, Cross-Border Post (PLBN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>![Graph for 2015 with 688 Internet Access Provision]</td>
</tr>
<tr>
<td>2016</td>
<td>![Graph for 2016 with 920 Internet Access Provision]</td>
</tr>
<tr>
<td>2017</td>
<td>![Graph for 2017 with 1,056 Internet Access Provision]</td>
</tr>
<tr>
<td>2018</td>
<td>![Graph for 2018 with 1,000 Internet Access Provision]</td>
</tr>
</tbody>
</table>

Source: Directorate General of Posts and Informatics Operations
3. Internet Governance

a) Implementation on e-Commerce Road Map E-Commerce

The definition of e-commerce is a process of buying and selling goods electronically by consumers and company to company through computerized business transactions (source: Laudon & Laudon, 1989). According to AT Kearney, the global e-commerce transaction value in 2015 has reached USD 1 trillion with growth rate of 18% (source: idEA). In 2014, the transaction retail value in ASEAN countries was less than 1%, while in US, China, Europe and Singapore, the e-commerce retail value has reached 5%-8%.

According to data from the Central Bureau of Statistics (BPS), the total population of Indonesia has reached 255 million in 2015 and the number will grow to 268 million in 2020 (Source: EIU). The large number of population, growing number of internet penetration and increasing per capita national income from 41.92 million rupiahs in 2014 to 47.96 million rupiahs in 2016 will continue to be the driving force of the national e-commerce market.

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**Graphic 1.3 SMEs Positioning in Indonesia 2020 Digital Economy Vision**

**Information**

**POSITIONING UMKM IN INDONESIA 2020 DIGITAL ECONOMY VISION**

- Benefit of digital technologies for Indonesia SME
  1. Up to 80% higher growth in revenue
  2. One and half times more likely to increase employment
  3. 17 times more likely to be innovative
  4. SMEs with higher digital engagement are more competitive internationally

**Assumptions**

- Mc Kinsey Global Institute Report: SMEs heavily using web technologies grow 2x as much as others
  
**Source: Mc Kinsey Research**

- Boosting SMEs digital engagement could increase Indonesia’s annual economic growth by 2%
  
**Source: World Bank Research**

---

**Using Mc Kinsey research: SMEs heavily using web technologies grow 2x as much as others**

- 9% of SMEs (Advanced online/ already digital)
- 18% of SMEs (Intermediate online/ ready to digital)

**Digital started on 2017**

- 2015 - 2017 GDP growth of 6.23% per year
  
**(source: BPS, GDP growth data in 2012)**

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**Graphic 1.3 SMEs Positioning in Indonesia 2020 Digital Economy Vision**

**Sumber:** Stancombe Research & Planning, Deloitte Access Economics, 2015; BPS, 2012; Mc Kinsey Research, World Bank Research
Based on Presidential Regulation no. 74/2017, E-commerce Road Map is one of Government’s efforts to increase e-commerce market share through 31 initiatives in which MCI is involved in 17 initiatives. MCI has collaborated with more than 8 related ministries/institutions and ecosystem actors to develop the National E-commerce Road Map. This roadmap aims to make Indonesia as the largest e-commerce industry ecosystem in Southeast Asia in the next 5 years. This is also in line with the Presidential Instruction to actualize the Indonesia Go Digital vision, which is targeted to achieve e-commerce transaction value of US$130 billion in 2020. This National E-commerce Roadmap 2017-2019 has been discussed among ministries/institutions and launched in Economic Policy Package XIV on 10 November 2016. The policy will prioritize and protect the national interest, especially SMEs and startup business actors.

b) Implementation of e-Government in MCI

1. WBS.layanan.go.id

MCI has created a Whistle Blowing System as one of the efforts to have early detection and prevention on potential violations as well as to facilitate reports regarding corruption that may happen within the ministry. WBS is intended as a tool for public to report information about violations and/or dissatisfactions with services provided by MCI’s officials/employees, in order to prevent and eradicate corruption, to stop abuse of authority and also to improve supervisory system that provides protection to whistleblowers.

Ministry of Communications and Informatics has built and run WBS application, which is https://wbs.layanan.go.id.

It was reported that up to December 2017, there were no reports of violations or indicators of corruption or abuse of authority within the ministry through MCI’s wbs website.
2. Posts Operations Licenses

With the automation of licensing process services in the Directorate General of Post and Informatics Operations (DG PPI), changes occur in the business process for licensing service which become faster and simpler. This online licensing process reduces the duration needed by industry or business entities who are applying for posts operations license into 1-2 working days. The following is simplification of the DG PPI licensing process:

<table>
<thead>
<tr>
<th>Type of License</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posts Operations</td>
<td>5-10 WD</td>
<td>1 WD</td>
</tr>
</tbody>
</table>

3. Telecommunications Operations Licenses

With the automation of licensing process services in the Directorate General of Post and Informatics Operations (DG PPI), there are changes in the licensing service business process which make them faster and simpler. This online licensing process reduces the duration needed by industry or business entities applying for telecommunications operations license into 1-2 working days. The following is simplification of the DG PPI licensing process:

<table>
<thead>
<tr>
<th>Type of License</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles &amp; Operations for Telecommunications Networks and Services</td>
<td>14 WD</td>
<td>1 WD</td>
</tr>
<tr>
<td>Jenis Izin</td>
<td>30-56 WD</td>
<td>14 WD</td>
</tr>
</tbody>
</table>
4. Broadcasting Operations Licenses

Licensing process in 2015 and 2016 referred to Ministerial Regulation No. 28 of 2008 on Procedures and Requirements for Broadcasting Operations Licensing, in which the licensing process duration was not regulated in detail. The average licensing process in 2015 was completed within 5 months period and in 2016 is within 3 months period. Meanwhile, the licensing process in 2017 is carried out in reference to Ministerial Regulation No. 18 of 2016 where the duration for each licensing process is clearly regulated. The average licensing process in 2017 is completed within 30 days (1 month) period.

The following is the diagram of the broadcasting operations licensing process duration from 2015 to 2017.


5. Lapor.go.id

The www.lapor.go.id website is a public complaint service administered by the Office of Presidential Staff (KSP) in cooperation with the Ministry of Administrative and Bureaucratic Reform (PAN/RB) and the Ombudsman. This channel accommodates broader scope of complaints. In 2017, MCI has received several complaints related to telecommunications network signal, internet signal, equitable access to telecommunications, re-registration of prepaid cards, television shows, regulations and policies.

The number of complaints submitted in 2017 was 97 complaints with the following details:

- Incoming complaints: 97
- Complaints that have been followed up: 97
- Complaints still in process: 0

6. DG PPI Service Excellence

The www.pelayananprimaditjenppi.go.id website is a channel for public to report their complaints for issues related to licensing such as licensing for posts, telecommunications, and broadcasting.

The number of complaints submitted in 2017 were 32 complaints with the following details:

- Incoming complaints: 32
- Complaints that have been followed up: 32
- Complaints still in process: 0
7. Call Center 159
The number of complaints in 2017 was 1,288 with the following details:

- Incoming complaints: 1,288
- Complaints that have been followed up: 1,197
- Complaints still in process: 91

8. One-Stop Integrated Service (Ptsp)
The number of community complaints through this portal in 2017 was 39 with the following details:

- Incoming complaints: 39
- Complaints that have been followed up: 39
- Complaints still in process: 0

c) SIVION

The vision of Indonesia to fully implement e-government and to become a digital economy giant in ASEAN may be hampered by the high rate of fraud and the low level of integrity in Indonesia digital ecosystem. The Government needs to be present to improve security and integrity in Indonesia digital ecosystem. This SIVION program is to provide the public key infrastructure mechanism that becomes the root of digital certification industry in Indonesia. Therefore, the spirit of this program is to build digital identity infrastructure and to create digital certification industry and demand in Indonesia. The objective of SIVION is to carry out a national digital certification infrastructure and a national digital identity verification system that is interoperable, efficient and secure, and guaranteed by the Indonesian Government.

As the main strategy, MCI has prepared a strategic plan by taking into account:

- Achievement in the digital signature implementation building blocks
- Identified Risks
- Challenges resulted from implementation
The following figure shows projects and their strategic plans of SiVION implementation.

**Figure 1.9 Strategic Plan on the implementation of SiVION**

<table>
<thead>
<tr>
<th>Projects and Strategic Plans of each SiVION Implementation</th>
<th>Policies and Regulations</th>
<th>National Digital Certification Industry Digital</th>
<th>Implementation to Service Providers</th>
<th>User Acquisition</th>
<th>Dissemination of Digital Signature Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision of PSTE Government Regulation, Regulations of the MCI, Decree of the DG of Informatics Applications</td>
<td>Development of a national PKI scheme (Root CA &amp; CA)</td>
<td>Commitment Binding for Sectoral Regulatory</td>
<td>CA commitment binders (national target)</td>
<td>Endorsement for HR Bureau of Ministries/Institutions/Departments as Government RA</td>
<td>SIVION monthly electronic newsletters</td>
</tr>
<tr>
<td>National digital certification agency</td>
<td>CA commitment binders (national target)</td>
<td>Facilitation for sectoral regulation issuance</td>
<td>Facilitation, assistance, and guidance</td>
<td>Obligation for application in e-office</td>
<td>Promotion above the line: print and virtual media</td>
</tr>
<tr>
<td>Steering Committee for Implementation Acceleration</td>
<td>Regulation of national digital certification industry</td>
<td>Facilitation, assistance, and guidance</td>
<td>Facilitation, assistance, and guidance</td>
<td>Seminar for law and judicial system enforcements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CA commitment binders (national target)</td>
<td>CA commitment binders (national target)</td>
<td>CA commitment binders (national target)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Development of API for Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1Techniques, regulations and procedures

Source: DG of Informatics Applications, MCI, 2017
In 2017, a series of dissemination programs were held to promote the benefits of digital signatures, and the target of 109,317 digital certificates was reached. One example of the implementation of digital certificate use was the PNS mail service, which has been completed with digital certificate features and converted into mail.go.id. The mail.go.id was launched on 11 December 2017 and inaugurated by the Minister of Communications and Informatics. Mail.go.id is a migration of pnsmail.go.id as well as email development of go.id. The development was done by adding a function for digital certificate, making go.id email have digital signature and encryption features. This development was intended to ensure confidentiality, authentication, integrity, and non-repudiation of the go.id email system. The development activities were:

- Application development
- User acquisition from pnsmail.go.id
- Digital certificate issuance

Therefore, the utilization of digital signatures and encryption has made email senders and email recipients identifiable to avoid any fake emails. In addition, it will also add security to email sniffing.
One indicator that can be used for assessing the levels of welfare of farmers and fishermen is Farmers Exchange Index (NTP) and Fishermen and Fishery Cultivation Exchange Value (NTNP). NTP and NTNP are the comparison between the received price index (It) and paid price index (Ib) of farmers and fishermen. These indicators are useful to measure the welfare of farmers and fishermen as it measures the exchange ability of commodities produced/sold by farmers and fishermen to the products needed by farmers and fishermen, both for the production process (business) and for household consumption. If the NTP or NTNP is higher than 100, it means that the purchasing power of farmers or fishermen in that period is relatively better than the base year period. On the contrary, if NTP or NTNP is less than 100, it means there are a decline in farmers or fishermen purchasing power.

In this regard, the Ministry of Communications and Informatics has a role to provide an appropriate integrated solution for communities in foremost, outermost and lagging (3T) and Priority (LokPri) areas so as to increase productivity and provide access to the online market/marketplace.

In order to improve the welfare of farmers and fishermen, we need to utilize information and communication technology (ICT) infrastructure to acquire the best selling price. Integrated Broadband Village Program means to provide infrastructure and access to information services (broadband) in non-commercial areas supported by CPE as well as productive application content for community empowerment. After the implementation of the Integrated Broadband Village Program in 50 villages in 2015, a comparative method is required, which is individual method, to give the device directly to the villagers. Therefore, in 2016, the development target of 100 Integrated Broadband Villages (DBT) was postponed, for mapping and testing the comparator method, to give directly to individuals. To implement the individual method, a further mapping on needs of application, content, and human resource empowerment technique so that people in those area are able to adjust to the presence of broadband. Through the mapping, it is expected that the community receives applications and contents that are in accordance with their needs.
SDBT Program aims to provide an integrated solution that includes the providing of Network, Device, Application and Capacity building (NDACb) in 500 3T villages and selected priority areas selected for improving community welfare. The implementation process of the SDBT program was preceded by 3 pilot villages, to examine technological solution options in order to meet the needs of farmers and fishermen. The provision of NDACb for SDBT program were made in three stages, namely; Piloting phase in 3 villages that has been completed in 2017, implementation phase in 300 villages to begin in mid 2018, and implementation phase in 200 villages which is to be implemented in 2019.

MCI has conducted trials in three areas, namely:

1) **Meskon Village**, Bengkalis subregency, Bengkalis regency, Riau Province (Fishing Village)

2) **Fatukbot Village**, South Atambua subregency, Belu regency, East Nusa Tenggara (NTT) Province (Farming Village)

3) **Panca Karsa 1 Village**, Taluditi subregency, Pohuwato regency, Gorontalo province (remote areas)

This trial has went well. The integrated application have been disseminated to the community in simultaneous with training on promotion and mentoring.
In 2017, the Integrated Broadband Village (DBT) program has been re-implemented targeting villages in 3T areas to be internet literate. The implementation of human resources assistance and development is targeted to be implemented in 150 villages. However, in its implementation, the program was successfully implemented in 222 villages as follows:
In 2017, the concept of Integrated Broadband Village Program was changed into Integrated Broadband Village Solutions (SDBT) by the provision of appropriate Network, Device, Application, and Capacity Building (NDACb) for communities in 3T and priority areas, which are divided into farm, villages and remote villages so as to increase productivity and provide access to market/marketplace as well as to get the best selling price in order to improve their welfare.

In 2017, the Integrated Broadband Village (DBT) program has been re-implemented targeting villages in 3T areas to be internet literate. The implementation of human resources assistance and development is targeted to be implemented in 150 villages. However, in its implementation, the program was successfully implemented in 222 villages.
b) 1,000 Digital Startup National Movement Nasional

The 1000 Digital Startup National Movement is a movement to manifest Indonesia’s potential becoming The Digital Energy of Asia in 2020 by forming 1000 startups that can become a solution against various challenges by utilizing digital technology. This movement was initiated by the Ministry of Communications and Informatics, supported by other institutions and communities such as KIBAR. KIBAR is a company that aims to build technological ecosystem in Indonesia through capacity building initiatives, mentoring, and incubation in various cities.

The potential of digital industry in Indonesia can not be underestimated. Data from APJII survey in 2016 shows that internet users in Indonesia has reached 132.7 million. This is a valid ground for Indonesia to develop e-commerce and digital technology based business in the country. The volume of e-commerce business in Indonesia is predicted to reach USD 130 billion with annual growth rate of about 50 percent.

The goal of this program is the development of human resource capacity in the field of information and communication technology within the age range from 18-40 years who have the intention and spirit to build a digital business/teknopreneur.
To create 1,000 digital startups, the strategy is intensive mentoring and coaching through systematic stages in 10 cities: Medan, Jakarta, Bandung, Jogyakarta, Semarang, Malang, Surabaya, Bali, Makassar, and Pontianak that have a strong infrastructure and digital foundations.

The first step began with ignition, which is a seminar to instill entrepreneurial mindset targeting 8,000 participants annually. Then, 4,000 participants were selected to proceed to the workshop stage, to be given briefing on skills needed to make a digital startup. With the knowledge from the workshop, 2,000 participants will proceed to the hackathon stage to produce a product prototype of application solution. After that, 1000 participants will enter the bootcamp stage, which is an in-depth mentoring session to prepare strategy on product launching. Finally, 200 selected participants will be incubated for approximately 3 months in each city per year, so in 5 years, 1,000 digital startups will be created.

**FIGURE 1.13 STAGES OF 1000 DIGITAL STARTUPS INITIATIVE**

**Stages of 1000 Digital Startup**

- **IGNITION**
  - Instilling entrepreneurship mindset

- **HACKSPRINT**
  - Forming team to make prototype of a product

- **INCUBATION**
  - Second mentoring phase for becoming digital startup ecosystem

- **WORKSHOP**
  - Providing basic skill needed for forming a digital startup

- **BOOTCAMP**
  - In-depth mentoring to launch product.

Website: [http://1000startupdigital.id](http://1000startupdigital.id)

*Source: Directorate General of Informatics Applications, MCI, 2017*
After completing the incubation process, we had a number of potential startups:

1. **Karapan (Surabaya)**
   Karapan empowers and connects local livestock farmers with stakeholders throughout the beef supply chain.

   - +200 livestock farmers from +33 groups of livestock farmers
   - +822M IDR of total transaction in 3.5 months

2. **Jahitin (Surabaya)**
   Jahitin empowers mothers who work as tailors and earn less than 3 million/month by connecting skilled tailors to consumers who want to have the right clothes.

   - +30 tailors
   - Add income for tailors up to Rp 18 mio after it was launched in the end of 2017

3. **Tumbasin (Semarang)**
   A platform that connects consumers directly to farmers in traditional/wet markets.

   - +2500 transactions
   - +5 local markets in Semaran

4. **Camp on Farm (Bandung)**
   Camp On Farm is an online vacation plan management platform that targets urban communities to spend vacations in agricultural areas, guided by local farmers.

   - +200 people are joining
   - +15 trips

5. **Shushi (Bali)**
   An e-commerce that sells seaweed and connects farmers to consumers.

   - +20 seaweed farmers
   - +650 products sold

6. **Ajarin (Jakarta)**
   A mobile app that can help parents discover, develop, and channel their children's talents aged four to sixteen.

   - +370 private teachers
   - +30 transactions

7. **Kopi Tani (Makassar)**
   A platform that sells coffee directly from coffee farmers.

   - +100 coffee farmers
   - +5 coffee farms in Makassar
1000 Digital Startup National Movement

**Benefits**

1) To reduce welfare gap by sharing economy, financial, inclusion and workforce digitalization models

2) To increase product marketing coverage areas for business actors;

3) Multiplier effect: to provide employment opportunities (direct or indirect)

**Beneficiary**

1) Indonesian people who are the target user of the application

2) Central and regional governments

3) Digital startup actors who participate in this program

**Development**

Until December 2017:

- **30,667** people have registered
- **6,546** participants were selected
- **121 teams** from **10 cities** have participated in the incubation program
- **36 digital startup companies** were created from this movement in 2017

**Until the end of 2017**

- **121 teams** of technopreneur candidates
- **85 teams in incubation stage**
- **36 teams** have completed all the stages

**Target of Locations**

- Jogjakarta
- Surabaya
- Bandung
- Semarang
- Malang
- Denpasar
- Makassar
- Pontianak
- Medan

**Implementation time**

- **Start**: 2016
- **End**: 2020

**Map**

- Jakarta
- Bandung
- Yogyakarta
- Semarang
- Malang
- Surabaya
- Bali
- Makassar
- Pontianak
- Medan

**Statistics**

- **Number of registrants**: 30,667
- **Number of participants**: 6,546
- **Number of mentors and coaches**: 370
- **Number of partners**: 165
- **Number of Media Coverage**: 710
The vision of the Government is to make Indonesia a country with the largest digital economic growth in 2020. President Joko Widodo himself has stated that digital economy can bring great benefits to the people, especially for Micro, Small and Medium Enterprises (MSMEs). According to the President, the form of government support to MSMEs is through policy deregulation, capacity building training for MSMEs, and the provision of adequate telecommunications infrastructure.
Based on the records of Deloitte firm that has conducted a poll to 437 MSMEs in Indonesia in 2015, it was found that MSMEs who are actively using the internet will be able to earn 80 percent higher revenues than those who are still conventional. It is also believed that Indonesia’s economic growth which remains at 4.6%, will be able to increase another two percents.

Graphic 1.4 MSMEs Positioning On Indonesia Digital Economy Vision 2020

**Information**

Benefit of digital technologies for Indonesian SME
1. Up to 80% higher growth in revenue
2. One and half times more likely to increase employment
3. 17 times more likely to be innovative
4. SMEs with higher digital engagement are more competitive internationally

**POSITIONING UMKM IN INDONESIA 2020
DIGITAL ECONOMY VISION**

- Mc Kinsey Global Institute Report: SMEs heavily using web technologies grow 2x as much as others
- Boosting SMEs digital engagement could increase Indonesia’s annual economic growth by 2%

Source: Mc Kinsey Research
Source: World Bank Research

**Assumptions**

- 9% of SMEs (Advanced online/ already digital)
- 18% of SMEs (Intermediate online/ ready to digital) - digital started on 2017 - 2015-2017 GDP growth of 6.23% / year (source: BPS, GDP growth data in 2012)

Using McKinsey research:
SMEs heavily using web technologies grow 2x as much as others

Perhitungan Tahun 2015 berdasarkan PDB Tahun 2012

- PDB: 18% UMKM ready to digital (in Triliun Rp)
- PDB: 9% UMKM already digital (in Triliun Rp)

Program Facilitation 8 Million Micro, Small and Medium Enterprises (SMEs) Go Online aims to create 8 Million Indonesian MSMEs to enter the online market platform starting in mid 2017. MCI as Government representation must initiate this movement in cooperation with all related stakeholders to increase public awareness including MSMEs on the use of online market platform and support online market platform program in making MSMEs as merchant in their own online market. The purpose of this program is to open new market opportunities and new consumers for Indonesia’s MSMEs both in regional and global market. From this program, MCI expects benefit of “Improving people’s productivity and competitiveness in international markets” which is in line with the mandate of Nawacita

6. Tahapan yang dilakukan mencakup:

a. To disseminate and coordinate with related stakeholders internally and externally in preparing the implementation through Coordination Meeting/Focus Group Discussion and submission of Cooperation Agreement (CA) with stakeholders to establish cooperation;

b. To formulate communication strategy to increase awareness to the Facilitation program for 8 million MSMEs Go Online that will be done until 2019;

c. To educate and assist MSMEs to market their products online;

d. To monitor the implementation of MSMEs conversion into e-MSMEs in collaboration with e-commerce players;

e. To evaluate activities implementation with executive team to be able to adjust with the most effective Term of Reference.
To implement this program, the following activities must be carried out:

a) Formulation of Educational Materials

The formulation of educational materials is conducted by composing and gathering inputs from related stakeholders and the materials will be disseminated through: Public Service Announcement (PSA), Instagram, Facebook, Video Animation, and Website (http://umkmgoonline.id). The materials are made by Marketplace, ICT Volunteers and Directorate General of Information and Public Communications MCI.

b) MSMEs Go Online Education

MSMEs Go Online Education in 2017 has been conducted in cooperation with Local Government and Marketplace in 61 locations with 12,507 participants and incoordination with Ministry of SMEs, Ministry of Industry, Ministry of Trade, Ministry of Coordinating Economy, and PT. Komunikasi Indonesia.

c) Cooperation Agreements are conducted with various related stakeholders to make MSMEs online. The CAs are made with: Idea, Marketplace, and Nurbaya Initiatives.

d) Farmers and Fishermen Go-Online

To encourage the Government’s development focus 2015 – 2019 and to support the achievement of Nawacita 3 and Nawacita 7, MCI has designed Digital Based Economy Program in 2017, including “Farmers and Fishermen Go Online” program which is expected to provide solutions to the agricultural and fisheries sectors with the use of information and communication technology (ICT).

The objective is to provide solutions to challenges faced by agriculture and fisheries sectors, by facilitating the use of appropriate applications to support the business of farmers and fishermen and the performance of agriculture and fisheries sector. Educational assistance to farmers and fishermen was also conducted to add insight into the ICT utilization. The benefits are:

- Increased productivity and welfare of farmers and fishermen;
- Increased revenues in agriculture and fisheries;
- Better and more productive business activities for farmers and fishermen;
- Farmers and fishermen can gain knowledge needed to improve their business productivity;
- Farmers and fishermen can sell their products or commodities to direct buyers without intermediaries;
Farmers and fishermen receive educational assistance on the use of ICTs as a means to obtaining information that can support their employment and business.

Achievement of this fishermen and farmers go online program is 110% with the realization of 333,515 farmers and fishermen who are registered in applications specifically related to the agricultural and fishery sectors. Further explanation about the farmers and fishermen who became the target of this program and the selection criteria are as follows:

1. **Farmers**

Farmers mean farmers of food crops and horticulture in South Sumatra, West Java, and South Sulawesi. The main focus of the FarmersGo Digital program is a roll-out project to West Java, while in South Sumatra and South Sulawesi pilot projects will be undertaken. These three provinces are selected to be targeted areas of the program based on the following considerations:

- **Number of agricultural business households**
  - Area with farming business households ranging from 300,000 up to 1,327,000 household unit.

- **Number of farmer groups and trained agricultural extension workers**
  - Areas with farmer groups ranging between >25,000 up to <50,000 and areas with workers ranging between >2,000 up to 6,000 people.

- **The high volume of food crops and horticultural production**

![Figure 1.16 Map of Agricultural Households](source: Agricultural Census 2013, Central Statistic Agency)
2. Fishermen

Fishermen mean fishermen with boats under 10 GT in North Sumatra, East Java, and South Sulawesi. The main focus of the fishermen program is a roll-out project to East Java, while in North Sumatra and South Sulawesi pilot projects will be undertaken. These three provinces are selected to be the targeted areas based on the following considerations:

- Number of fishing households (area with fishing business households ranging from 30,000 upto 60,000 household unit)
- Number of fishing production (areas with farmer fishing production 300,000 upto 500,000 tons).
- Number of boats in those selected provinces
Figure 1.18 Fishery Households  Density vs Sea Capture Fisheries Production (Ton)

Figure 1.19 Number of Boats by Provinces  vs Sea Capture Fisheries Production

Source: Indonesia Statistics 2016

Graphic 1.6 Boat Population in Focus Areas

Source: Data.go.id, 2016
Facilitation and Mentoring Programs for Farmers and Fishermen Go Online
There are 6 supporting programs, namely:

1. Facilitation of National Stock Control Information Application
   The program aims to provide information about national harvest stock, including information on planting and harvesting schedules, and information on national data collection that are useful to support farmers' decisions in agricultural processes.

2. Facilitation on Online Agricultural Dissemination Application
   This program aims to encourage the development of online-based agricultural dissemination from industry players with accessible and valuable digital applications for farmers.

3. Facilitation on Online Agricultural Marketplace Application
   This program aims to encourage the development of online marketplace development for farmers so they can get buyers' assurance without any middleman.

4. Facilitation on hAsic Information Application for Fishermen
   The program aims to develop an application that can provide information on fish markets, fishing gear prices, weather, fishing areas, nearest fuel locations (SPDN), fish prices, and logistics.

5. Facilitation on Online Fishery Marketplace Application
   The program aims to encourage the development of online marketplace for fishermen so they can get buyers' assurance without any intermediaries.

6. Facilitation on Farmers Education and Fishermen Go Online
   Educational assistance program related to the use and utilization of applications mentioned in points 1-5. This is very important in ensuring that the benefits of these applications are channeled to the targeted farmers and fishermen.

In providing solutions of agricultural challenges, several facilitations are provided to utilize the appropriate applications to support farmers' business and agricultural sector performance, including: Facilitation on Utilization Marketplace Application, Online National Stock Information and Agricultural Extension. In order to present a digital solution to resolve issues related to farmers, the Ministry of Communications and Informatics identifies industry actors engaged in the agricultural sector, including:

- **eraqano**: Agricultural Marketplace
- **limakilo**: Agricultural Marketplace
- **TaniHub**: Agricultural extension
- **8villages**: Agricultural extension

purchase of agricultural production needs, cultivation assistance, access to capital, agricultural insurance, agricultural marketplace
5. Government Public Relations

The issuance of Presidential Instruction Number 9 of 2015 has instructed MCI to carry out Government Public Relation (GPR) tasks and functions, expecting that the delivery of information to the public can be done quickly, accurately and in good quality.

In addition, the preparation of a single narrative as the agenda setting will provide a consistent government information, so that there is a balanced information on government performance against media coverage that tend to be critical (negative) to the government.

Figure 1.20 Government Public Relations Workflow

Source: DG of Informations and Public Communications, 2016
The Objectives of Communications Programs

**Purpose:**
- Building public awareness and support

**Awareness:**
- Engaging with public for active participation

**Engagement:**
- Positive media coverage across Asia

**Call to Action:**
- Building public awareness and support

**Celebration:**
- Positive media coverage across Asia

**Post Event:**
- Building public awareness and support

**2017 Promotion and Communication Program**

- **Above the Line**
  - TV
  - Print Media
  - OOH

- **Through the Line**
  - Owned Media (Govt. website/social media/Videotron)
  - Earned Media (online media and KOLs participation)
  - Digital Activation

- **Below the Line**
  - Forum
  - Public Outsearch

**Variety Shows and Sport Documentary**
Print Media Cooperation

International Placement
Branding and Outdoor Media
Digital Campaign

Blog, Video and Photo Contests are monitored via hashtags #EnergiAsia with 3037 participations and #DukungBersama with 7523 participations.

Digital Information Content

9 series Partnership Program Workshop Roadshows in 70 Campuses

- 200 Participants (Design Students as the Main Target) from 70 Campuses
- Workshop on how to create Infographics and Video graphics
- Provide Issues or Theme to Participants
- Creating Infographics according to the Theme

ROADSHOW WORKSHOP 9 SERI

COMPEITION INFOGRAPHICS & VIDEOGRAFIS

GRAND FINAL

- Participants are Required to make Viral and Submit their Infographics and Video graphics Competed in the competition
- 1 (one) Winner will be determined every month in accordance with the tailored themes
- Prices are prepared for winning Infographics and video graphics

A Great Event will be Held as a closing ceremony for this Roadshow in the Metro TV Grand Studio

The Community will be Invited to the closing ceremony as participants for a Talk show Event

A winner for each Infographics and Video graphics Competitions will be determined
6. MCI’s Internal Programs

a) MCI’s achievements in the field of Bureaucratic Reform (RB)

The process of Bureaucratic Reform has been implemented in MCI since 2010 following the issuance of the Presidential Regulation No. 81 of 2010 on the grand Design of Bureaucratic Reform 2010 - 2025. In order to maintain the changes on course and measurables, guidelines that serve to establish and run macro, meso and micro programs, and provide common understanding to all levels within the Ministry of Communication and Informatics are required. Bureaucratic Reform working groups are also established to facilitate coordination in accordance with the area of amendment mandated by Presidential Regulation No. 81 of 2010 on the Bureaucratic Reform Grand Design.

The process of Bureaucratic Reform has been implemented in MCI since 2010 following the issuance of the Presidential Regulation No. 81 of 2010 on the grand Design of Bureaucratic Reform 2010 - 2025. The implementation of the Grand Design on Bureaucratic Reform is translated into a 5-Year Bureaucratic Reform Roadmap, and 2017 is included in the second period of 5 year roadmap (2015-2019).

Some of the main issues related to bureaucracy reform include mindset and innovation, quality of public services, organization, business processes and working procedures, laws and regulation, management of human resources apparatus, and authority. To solve these issues, the Ministry of Communications and Informatics established 9 Working Groups, each of which has developed annual action plan and activities based on the Bureaucratic Reform Roadmap of the Ministry of Communication and Informatics as shown in Figure 1.20 below.
1. Development of MCI's Acceleration Program (Quick Wins)
2. Development of MCI Management Risk
3. Formulation of MCI Strategic Plan 2015-2019
4. Submittance of draft of the regulation of the Minister of Communications and Informatics on the Organization and Work Procedures
5. MCI Public Service Integration
6. Position Analysis review for the formulation of organization review
7. Simplification of laws and regulation hampering service and business certainty.
8. Development of service complaint SOP.

Source: Ministry of Communications and Informatics, 2015
b) National Digital Literacy Movement

Recap of Activities 2017

MINISTRY OF COMMUNICATIONS AND INFORMATICS DIGITAL LITERACY WITH STAKEHOLDER JAN-DES 2017 PERIOD

Number of activity: 58
Number of City: 23
Number of Active Participant: 61,420

[Diagram depicting various activities and locations]
Online Presence Support

Situs literasidigital.id

Situs siberkreasi.id

Instagram Siberkreasi

#Firal Activity Support

books are ready for download and the number is increasing periodically
#Firal Literacy Documentation

Documentation of MCI Activities

Documentation of Literacy for Law Enforcement
Documentation of Literacy for School/Islamic Boarding School

Documentation of Literacy for Interfaith

Documentation of Literacy Content Creator
c) ICT Literacy Training for Persons with Disabilities

Nowadays, Information and Communication Technology (ICT) has regarded as a necessity. The transition to digitalization in various areas of life has changed many business patterns.

The acceleration of information and communication technology innovation is expected to increase economic growth and social welfare. The Ministry of Communication and Informatics (MCI) is responsible for organizing government affairs in the field of communications and informatics needs to have public policies which are adaptive to the existing development through ICT literacy. This is in order to meet the challenges of building a strong digital future and assist the President in organizing state government.

ICT literacy is the ability to use digital technology, communication tools and/or networks to define, access, manage, integrate, evaluate, create and communicate information properly and legally in order to build a knowledgeable society. ICT literacy is an important means to compete in the working world. Ministry of Communications and Informatics present to provide solutions for the human resources improvement to be able and ready to become reliable human resources in the field of ICT.

The goal of the ICT Literacy program is to provide ICT knowledge and expertise inclusively and equitably for all levels of society, especially children, women, disabled people and students. In implementing ICT Literation, the Ministry of Communications and Informatics conducts various activities that includes various training as follows:

- a) Microsoft Office Excel
- b) Microsoft Office Word
- c) Microsoft Office Power Point
- d) Internet
- e) Graphic Design
- f) Public Speaking
In 2017, the Ministry of Communications and Informatics has introduced ICT literacy to 7,291 people including school-age children, women, and disabled people. Physical realization of this activity reached 137.56% of the total target of 5,300 people with the following details:

<table>
<thead>
<tr>
<th>Category</th>
<th>2015 Realization</th>
<th>2016 Realization</th>
<th>2017 Realization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housewives</td>
<td>100</td>
<td>1.121</td>
<td>2.099</td>
</tr>
<tr>
<td>Children</td>
<td>6.001</td>
<td>9.415</td>
<td>4.862</td>
</tr>
<tr>
<td>Persons with Disabilities</td>
<td>455</td>
<td>1.771</td>
<td>330</td>
</tr>
<tr>
<td>SMEs</td>
<td>108</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Teachers/Instructors</td>
<td>-</td>
<td>59</td>
<td>-</td>
</tr>
<tr>
<td>Others</td>
<td>-</td>
<td>209</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>6.664</strong></td>
<td><strong>12.575</strong></td>
<td><strong>7.291</strong></td>
</tr>
</tbody>
</table>

Source: Agency for Research and Development of Human Resources, MCI, 2017

The Ministry of Communications and Informatics has provided trainings for 499 teenage with disabilities (15-24 y/o) and adults with disabilities (25-35 y/o) in ICT.

Jamboree for Disabled Youths and Adults 2017. The Jamboree was held in five major cities in Indonesia namely Jayapura, Balikpapan, Manado, Palembang and Yogyakarta.
Implementation of ICT Jamboree for Disabled Youths and Adults
d) National Working Competency Standards (SKKNI) Certification in the Communications and Informatics Field for Young Work Force

One of the priority agenda of development in the employment sector is the acceleration of improvement of labor competencies. Management of training and provision of support for strategic training programs are also included in the labor market policy of 2025. To prepare for this, increasing the number of skilled workers to face market openness is an unavoidable necessity.

There is a growing need to continuously promote such effort is considering that Indonesia has entered the ASEAN Economic Community (MEA) single market, which creates free flow of goods, services, capital, investment and skilled manpower in Southeast Asia. In line with the government's focus on vocational education in preparing ready-to-use skilled labor, the Ministry of Communications and Informatics intensify the provisions of SKKNI-based communication and informatics training and certification. The trainings are aimed especially for the young workforce, i.e. vocational high school graduates (SMK), collage graduate (D1, D2, D3) with ICT major. The goal is to have competence recognition in gaining employment and improve competitiveness in the working world.

Certification for young work force is expected to shape qualified young workforce to improve the ratio of skilled workers and increase their competitiveness with workers from other countries. SKKNI trainings and certification in communications field include Public Relations (PR) and multimedia. SKKNI training and certification in informatics field include digital imaging, Helpdesk, Multimedia, Practical Office Advance, Computer Operator, Graphic Design, Programming, Network Technician, Office Operator, and Network Administrator.

Skkni Certification For The Indonesian Work Force In 2017

<table>
<thead>
<tr>
<th>Target (People)</th>
<th>Graduation level</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,650</td>
<td>81.58%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of participants</th>
<th>Number of Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>11,531</td>
<td>9,407</td>
</tr>
<tr>
<td>2,202</td>
<td>1,723</td>
</tr>
<tr>
<td>9,329</td>
<td>7,684</td>
</tr>
</tbody>
</table>

Source: Agency for Human Resources Development and Research on Communications and Informatics, Ministry of Communications and Informatics, 2017
SKKNI-based National Certification in the Informatics Field in Mataram

SKKNI-based National Certification in the Informatics Field in Semarang
e) Change Management
Training in Ministry of Communications and Informatics

Background

Article 70 paragraph (1) and (2) of Law No. 5 of 2014 on State Civil Apparatus (ASN) state that ASN employees have rights and obligations in developing competence, which can be achieved through various means, one of which is through education and training. ICT industry with its characteristics of dynamic, creative and innovative, short life cycle, competitive, network has potential to become a remarkable instrument of change. Infrastructure industry is capital intensive, while content industry (creative destruction) is idea intensive and demands creative & innovative people, long life learning, open minded, forward looking, risk taker and speculative, persistence, nationalist, and humanist.

Objectives

1. MCI's Human Resources will experience changes in mindset, skillset, and toolset which form the nature, culture, and work structure from silo-attitude to collaborative-attitude, effective, efficient, community-oriented and forward looking;
2. MCI's Human Resources will understand the implications of technological developments on the national economy and community social behavior so as to have a sharpness in the public policy process that has broad impact for the community;
3. MCI's Human Resources will have the skills in managing priority programs which have massive impacts with innovative and out of box approaches within accountable deadlines;
4. MCI's Human Resources have the ability to explore the diversity of the nation as a source of competitive advantage;
5. MCI's Human Resources have the ability in mapping and risk mitigation/anticipatory/ risk-based planning;
6. Organization that is flexible and adaptable to change;
7. Service oriented organization

f) Complaints in the Field of Press

During 2017, the Press Council handled a total of 523 journalistic case complaints coming from communities, government/private institutions and other organizations. From these cases, 482 cases were received in 2017 and 41 cases were received at the end of 2016. By the end of 2017, the number of complaints completed was 426 cases (81%). The remaining 97 cases (19%) will be completed by 2018.

Cases of complaints are generally about violations of the Journalistic Code of Ethics by the media, either printed, electronic or cyber. The reported news failed to confirm the facts confirmation and clarification so that they tend to be herding opinion and being judgmental. Other complaints include the coverage on violence against children and women (violation of Article 5) and racist news (violation of Article 8). The settlement of the complaint cases were conducted through:

1. Mediation by generating Minutes of Agreements (51 cases);
2. Statement of Assessment and Recommendation (PPR) (40 cases) when agreement was not reached after attempting mediation;
3. Correspondence with complainants and complainers (334 cases);
4. Minutes of Meeting (1 case)

The dispute resolution of the press case took place in Jakarta and in some other areas of Indonesia.
g) World Press Freedom Day 2017

In 2017 Indonesia gained an honor from the UNESCO to host the World Press Freedom Day on 1 - 4 May 2017 at Jakarta Convention Center (JCC), Jakarta. The theme was “Critical Minds for Critical Times: Media’s Role in Advancing Peaceful, Just and Inclusive Societies”. The event was attended by 438 journalists and 1,081 participants from domestic and foreign country. World Press Freedom Day 2017 produced Jakarta Declaration that has 74 major points. Jakarta Declaration appealed to UNESCO member states, journalists, media industry, social media practitioners, internet users and all communities to jointly support and maintain the press’ independence.
h) Public Information Dispute Settlement Publik

Based on Law No. 14 of 2008 on Public Information Openness, The Information Commission has the duty as the provisions of Article 26 paragraph (2), that is to stipulate the procedure for the implementation of dispute settlement through Mediation and/or Non-litigation adjudication as well as to receive, examine and decide upon the Public Information Dispute and report on the performance of its duties pursuant to this Law to the President and House of Representatives of the Republic of Indonesia in once a year or at any time requested, as Applicant and Plaintiff. With the development of the types of cases handled, it is necessary to develop knowledge and skills related to the implementation of settlement of public information dispute to the parties mentioned above.

The following is the graphic on dispute settlement from 2010 to 2017:

**Graphic 1.8 Application and Dispute Settlement 2010-2016**

<table>
<thead>
<tr>
<th>Year</th>
<th>Applications</th>
<th>Settlements</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>76</td>
<td>51</td>
</tr>
<tr>
<td>2011</td>
<td>419</td>
<td>186</td>
</tr>
<tr>
<td>2012</td>
<td>237</td>
<td>237</td>
</tr>
<tr>
<td>2013</td>
<td>377</td>
<td>125</td>
</tr>
<tr>
<td>2014</td>
<td>1,354</td>
<td>123</td>
</tr>
<tr>
<td>2015</td>
<td>71</td>
<td>94</td>
</tr>
<tr>
<td>2016</td>
<td>64</td>
<td>54</td>
</tr>
</tbody>
</table>

Source: The Central Information Commission 2017

On the period of January - December 2017, the number of dispute settlement applications was 120 cases, with details as follows:

**Graphic 1.9 Application for Dispute Settlement 2017**

<table>
<thead>
<tr>
<th>Month</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>8</td>
</tr>
<tr>
<td>February</td>
<td>4</td>
</tr>
<tr>
<td>March</td>
<td>10</td>
</tr>
<tr>
<td>April</td>
<td>9</td>
</tr>
<tr>
<td>May</td>
<td>9</td>
</tr>
<tr>
<td>June</td>
<td>44</td>
</tr>
<tr>
<td>July</td>
<td>16</td>
</tr>
<tr>
<td>August</td>
<td>4</td>
</tr>
<tr>
<td>September</td>
<td>6</td>
</tr>
<tr>
<td>October</td>
<td>3</td>
</tr>
<tr>
<td>November</td>
<td>4</td>
</tr>
<tr>
<td>December</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: The Central Information Commission 2017
In 2017, the Central Information Commission only resolved 32 cases of information disputes with the following recapitulation:

From the 120 applications on public information dispute settlement received, the applicants are categorized as as individual and legal entit, in accordance with the Central Information Commission Law. Number of applications by category of applicants are shown in the following figure:

Public institutions that became Plaintiff in the Public Information dispute are identified based on the category shown in table 5. The data shown that the most disputed Plaintiff to the Central Information Commission is Village Government, as many as 25 cases. The second most disputed Public Institution are ministries, as many as 14 cases, as shown in graphic below:

Based on the data above, dispute settlement application received in 2017 was 120; 7 have been resolved and 113 have not been resolved.
In carrying out its duties and functions, the Ministry of Communications and Informatics is supported by 3,201 employees from various work units consisting of 2,070 men and 1,131 women.
CHAPTER 2
PROFILE OF THE MINISTRY OF COMMUNICATIONS AND INFORMATICS
1. Organizational Structure

Based on the Regulation of the Minister of Communications and Informatics No. 1 of 2016, the Organizational Structure of the Ministry of Communications and Informatics is as follows:

Source: Regulation of the Minister of Communications and Informatics No. 1 of 2016
In carrying out its duties and functions, the Ministry of Communications and Informatics is supported by 3,201 employees from various work units (data as of 31 December 2017) consisting of 2,070 men and 1,131 women. The employees are spread over seven Echelon I units with the following composition: (1) Secretariat General (431 employees), (2) Directorate General of Resources Management and Equipment of Posts and Informatics (1,299 employees), (3) Directorate General of Posts and Informatics Operations (324 employees), (4) Directorate General of Informatics Applications, (5) Directorate General of Public Information and Communications (296 employees), (6) Inspectorate General (77 employees), (7) Agency for Human Resources Development and Research on Communications and Informatics (556 employees), 4 expert staffs and 3 special staffs.

Source: Bureau of Human Resources and Organization, MCI, 2017
The above figure shows that based on education level, the composition of MCI’s employees are as follows: (1) 32 elementary school graduates, (2) 141 junior high school graduates, (3) 727 high school graduates, (4) 264 employees have Associate’s Degree (5) 1,427 have Bachelor’s Degree, (6) 568 have Master’s Degree, (7) 16 PhDs, and (8) 26 non-degree. Based on ranks, the composition are as follows: (1) 20 rank I, (2) 346 rank II, (3) 2,393 rank III, (4) 430 rank IV, and (5) 12 non-rank.

3. Simplification and Deregulation on Licensing

The results of simplification of regulation up to 2017 are as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of Regulation before Simplification</th>
<th>No.</th>
<th>Name of Regulation after Simplification</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Regulation of the Minister of Communications and Informatics No. 11 of 2010 on Operation of Internet Protocol Television Service (IPTV)</td>
<td>1.</td>
<td>Ministerial Regulation No. 6 of 2017 on Operation of Internet Protocol Television Service (IPTV)</td>
<td>Enacted on 7 Februari 2017</td>
</tr>
<tr>
<td>2.</td>
<td>Regulation of the Minister of Communications and Informatics No. 15 on the Revision of Regulation No. 11 of 2010 on Operation of Internet Protocol Television Service (IPTV)</td>
<td>2.</td>
<td>Ministerial Regulation No. 7 of 2017 on the requirements and Procedures for the Issuance of Posts Operation License</td>
<td>Enacted on 7 Februari 2017</td>
</tr>
<tr>
<td>3.</td>
<td>Regulation of the Minister of Communications and Informatics Regulation No. 32 of 2014 on the requirements and Procedures for the Issuance of Posts Operation License</td>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Regulation of the Minister of Communications and Informatics No. 9 on the Revision of Regulation No. 32 of 2014</td>
<td>4.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In 2017, 11 Ministerial Regulations have been simplified into 4 Ministerial Regulations, namely, Ministerial Regulation No. 6 of 2017, Ministerial Regulation No. 7 of 2017, Ministerial Regulation No. 8 of 2017, and Ministerial Regulation No. 9 of 2017.

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of Regulation before Simplification</th>
<th>No.</th>
<th>Name of Regulation after Simplification</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Decree of the Minister of Transportation No. 23 of 2002 on Implementation of Internet Telephony Service for Public Interest</td>
<td>3.</td>
<td>Ministerial Regulation No. 8 of 2017 on Operation of Telephony Internet Service for Public Purposes</td>
<td>enacted on Februari 7, 2017</td>
</tr>
<tr>
<td>6.</td>
<td>Decree of the Minister of Transportation No. 31 of 2004 on Revision of Decree of the Minister of Transportation No. 23 of 2002 on Operation of Internet Telephony Service for Public Purposes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Regulation of the Minister of Communications and Informatics No. 07/PM.Kominfo/5/2005 on the Second Revision of the Decree of the Minister of Transportation No. 23 of 2002 on Operation of Internet Telephony Service for Public Purposes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Regulation of the Minister of Communications and Informatics No. 10 of 2014 on Revision of Regulation No. 21 of 2013 on Content Provision Services Operation on Mobile Cellular Network and Local Fixed Wireless Network with Limited Mobility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Regulation of the Minister of Communications and Informatics No. 24 of 2014 on the Second Revision of Regulation No. 21 of 2013 on Content Provision Services Operation on Mobile Cellular Network and Local Fixed Wireless Network with Limited Mobility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Regulation of the Minister of Communications and Informatics No. 6 of 2015 on the Third Revision of Regulation No. 21 of 2013 on Content Provision Services Operation on Mobile Cellular Network and Local Fixed Wireless Network with Limited Mobility</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MCI always able to maintain reliable, safe, and responsible electronic transaction system operation through Electronic Systems Operators (PSE) registration program.
CHAPTER 3
THE STATISTICS IN THE FIELD OF COMMUNICATIONS AND INFORMATICS
1. Statistics of Internet Users in Indonesia

a) Distribution of Site Base Transceiver Station (BTS) 2G

The influx of the new 4G technology in Indonesia since a few years ago made mobile cellular networks providers switch from Base Transceiver Station (BTS) 2G to the latest BTS generation construction. This is indicated by the average growth of 2G BTS development which is only by 8% per year. The following is 2G BTS growth data from 2011 to 2016 based on region:

The data above shows that the development of 2G BTS from year to year is insignificant. The number of BTS 2G construction experienced increase and decrease from year to year. The following is map of the distribution of BTS 2G in Indonesia 2017:
Indonesia experienced a fairly significant growth of 3G BTS, especially in the eastern part of Indonesia such as Sulawesi, Bali, Nusa Tenggara, Maluku and Papua. The following graphic shows data on the development of the number of 3G BTS between 2011 and 2016 by region:

The above picture shows that BTS 2G construction in Indonesia is 133,903 BTS with signal-covered location in 31,361 villages, 6,172 sub-districts, 511 regencies/municipalities, and 34 provinces.

b) Distribution of Base Transceiver Station (BTS) 3G Sites

Indonesia experienced a fairly significant growth of 3G BTS, especially in the eastern part of Indonesia such as Sulawesi, Bali, Nusa Tenggara, Maluku and Papua. The following graphic shows data on the development of the number of 3G BTS between 2011 and 2016 by region:

The data shows that the development of 3G BTS is increasing every year. The number of BTS in always increases in every region. The following is a map of BTS 3G distribution area in Indonesia 2017:
The figure shows that there are 171,007 3G BTS developed in Indonesia, which have provided signal coverage for 27,488 villages, 5,613 sub-districts, 492 regencies/municipalities, and 34 provinces.

c) Distribution of Base Transceiver Station (BTS) 4G Sites

Nowadays, fast internet service 4G LTE is available for Indonesian people, although the coverage is still limited. Until the end of 2016, six mobile operators have provided 4G LTE service. This number increased by 115% compared to 2015. The following is graphic on the development of the number of 4G BTS between 2015 and 2016 by region:

The data above shows that there is an increasing number of 4G BTS development from 2016 until 2016. The largest number of BTS 4G LTE developments is in DKI Jakarta. The following is map of the distribution of BTS 4Gsites in Indonesia 2017:
The figure shows that Indonesia has 55,701 BTS 4G which have signal coverage for 12,002 villages, 3,394 sub-districts, 481 regencies/municipalities, and 34 provinces.

d) Number of BTS 2G, 3G, and Node 4G Ownership

Until Q2 2017, 59.07% or 1,122,099 km² of Indonesian territory has been covered by 2G signal. Based on Indonesia’s residential areas, 98.13% or 43,730 km² areas has been covered by 2G signal. Based on data presented by the seven cellular operators, up to Q2 2017, the number of Indonesia’s villages that have been covered 2G signal are 73,466 villages (88.28%).

The number of Indonesia’s sub-districts that have been covered 2G signal are 6,400 sub-districts (89.20%). The number of Indonesia’s regency/municipality that have been covered 2G signal are 488 districts/cities (94.94%). All provinces of Indonesia have been covered by 2G signals.
until Q2 2017, as many as 33.5% of Indonesian territory (or 636,390 km²) has been covered by 3G signal. However, according to residential areas, 3G coverage in Indonesia has reached 41,406 km² or 92.91% of the residential area of Indonesia.

Figure 3.5 3G Coverage in Indonesia Until Q2 2017

Based on data coverage from 7 mobile operators, until Q2 2017, the number of villages in Indonesia covered by 3G signal has reached 62,466 (or 75.09%) villages, 5,557 (or 77.45%) sub-districts, 447 (or 86.96%) regencies/municipalities. All provinces in Indonesia has been covered by 3G signals.

Until Q2 2017, as many as 14.15% of Indonesian territory (or 268,905 km²) has been covered by 4G signal. However, based on residential areas in Indonesia, the area covered by 4G signal reached 33,019 km² or 74.09% of residential areas of Indonesia.
Until 2016 there were 3 network operators that have commercial satellites:}

**Table 3.1 Network Operators that have Commercial Satellite**

<table>
<thead>
<tr>
<th>NO</th>
<th>ORGANIZER NAME</th>
<th>SATELLITE NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>PT Indosat, Tbk</td>
<td>PALAPA D</td>
</tr>
<tr>
<td>2.</td>
<td>PT Media Citra Indostar</td>
<td>INDOSTAR 2</td>
</tr>
<tr>
<td>3.</td>
<td>PT Telkom Indonesia Persero, Tbk</td>
<td>TELKOM 1, TELKOM 2</td>
</tr>
</tbody>
</table>

Based on data from 7 cellular operators until Q2 2017 the number of villages in Indonesia that have been covered by 4G signal reached 423,496 (or 50.88%) villages, 3,805 (or 53.03%) sub-districts, and 297 (or 57.97%) regencies/municipalities. All provinces in Indonesia have been covered by 4G signals.

**e) Satellite Services**

Until 2016 there were 3 network operators that have commercial satellites:

Palapa D Satellite is an Indonesian communications satellite owned and operated by PT Indosat, Tbk. The satellite was launched on August 31, 2009 and is predicted to expire in 2020. Palapa D serves coverage areas throughout Indonesia, ASEAN countries, parts of Asia, Middle East and Australia. The satellite is equipped with 24 standard C-Band Transponders, 11 Extended C-Band transponders and 5 Ku-band transponders.

Telkom-1 or A2100A is a geosynchronous satellite launched into space to replace the Palapa B2R satellite. The Telkom-1 satellite is a satellite that provides local television channels in addition to Palapa D and is configured with 24 C bands and 12 extended C-Band transponders. Telkom-1 is positioned at 108 degrees East Longitude covering all parts of Indonesia, Southeast Asia and northern Australia.
Telkom Satellite 2, which was launched on 16 November 2005, supports a backbone transmission communications system that includes long-distance telecommunications services (SLJJ), international direct connections (SLI), internet, and communication networks for military purposes. The Satellite that circulates in orbit 118 ° east has a capacity of 24 transponder C-band and weighs 1.975 kg. Its coverage reaches across ASEAN, India and Guam.

f) FO Distribution and Network

Network and optical developments in Indonesia are inseparable from the development of the telecommunication industry. Until 2016 there were 54 fixed network operational licenses and 46 switched-packet based fixed network operation license with fiber optic technology owned by 85 telecommunication network providers. Until January 2018 from 82.68% of 514 regencies/municipalities in Indonesia have been connected to national fiber optic backbone network.

2. Subscriber of Telecommunication Networks

![Figure 3.7 Market Share of Mobile Network by total of Customers in 2016](image-url)

<table>
<thead>
<tr>
<th>Network Provider</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>TELKOMSEL</td>
<td>45.11%</td>
</tr>
<tr>
<td>HUTCHISON 3 INDONESIA</td>
<td>17.75%</td>
</tr>
<tr>
<td>SMARTFREN, TBK</td>
<td>0.90%</td>
</tr>
<tr>
<td>SMART TELECOM,</td>
<td>1.96%</td>
</tr>
<tr>
<td>XL AXIATA, TBK</td>
<td>12.05%</td>
</tr>
<tr>
<td>SAMPOERNA TELEKOMUNIKASI</td>
<td>0.01%</td>
</tr>
<tr>
<td>INDOMOBIL, TBK</td>
<td>22.21%</td>
</tr>
<tr>
<td>INOSAT, TBK</td>
<td>22.21%</td>
</tr>
</tbody>
</table>
Initially, the FWA service became a successful alternative for the expensive GSM cellular fares. However, the tight competition in telecommunication industry makes FWA whose service is limited to one area code, no longer popular, because GSM cellular with national coverage is no longer synonymous with expensive tariffs. Therefore, in 2014, FWA license is officially revoked and replaced in the form of cellular license with neutral technology. With the demise of FWA services, FWA customers switched to mobile phone and cellular customers are increasing, while PSTN customers tend to be constant.
3. Telecommunication Traffic Data

a) Mobile Traffic Data

Total outgoing and incoming traffic from 7 operators in recent years continued to increase, although in 2012 and 2013 they experienced significant declines. The increase indicates the increasing needs for communication of Indonesian people.

If we look closer to this graphic, we can see that in each year, the volume of outgoing and incoming traffic are almost of equal amount. This means that the paid interconnection fee is almost the same as the one received, due to traffic situation that always the same most of the times. The graphic above shows that in 2016 the volume of outgoing and incoming traffic had increased compared to 2015 which amounted to 3.85% for outgoing and 3.02% for incoming.
b) Public Switched Telephone Network (PSTN) Traffic data

The data above shows that operator with the highest traffic for outgoing PSTN is PT Telkom Indonesia, Tbk and for incoming PSTN the three operators have similar volume.

c) International Direct Dialing (IDD) Traffic Data

The above data shows that based on Operational Activities Report (LKO) 2016, PT Telkom Indonesia Tbk outgoing IDD reached 76.13% and PT Indosat, Tbk 23.87%, while for incoming IDD, PT Telkom Indonesia, Tbk 67.76% and PT Indosat, Tbk 32.24%.
4. Subscriber of Telecommunication Services

a) Subscriber of Internet Service Provider (ISP)

ISP operator is a telecommunication service provider that sells internet access services to end customers and is not for resale. ISP subscriber is a subscriber who has a written contract with the ISP provider and not a subscriber of access service using mobile network media.

End subscribers who use Internet access services are divided into three types, namely: personal, corporate, and Internet cafes. In 2016 ISP has a total of 7,468,694 subscribers. According to customer type, The ISP subscriber is dominated by personal customers with percentage of 99.21%. Meanwhile, the internet café customer has the smallest number with percentage of 0.05%.

The number of ISP subscribers according to access media used can be seen in Figure 3.9. Most of ISP subscriber use Wireless media as their access media with a percentage of 53.24%, while satellite became the media that is used the least with a percentage of 0.04%.
The distribution of ISP subscriber in Indonesia in 2016 is shown in Figure 3.10. According to the figure, ISP subscriber is dominated by subscriber in Java region. The region has 61% of the total subscriber in Indonesia.

According to the figure, ISP subscriber is dominated by those residing in Java region which is amounted to 282,133 - 3,694,250 subscribers. The region has 61% of the total subscriber in Indonesia. The second biggest number of subscriber of ISP is in Sumatra island, followed by Borneo, Sulawesi, Papua, and other small islands.

According to Law of the Republic of Indonesia Number 38 of 2009 article 4 on Post, postal operation in Indonesia shall be conducted by business entities established under Indonesian law. The business entities shall comprise: state-owned enterprises; regional government-owned enterprises; private enterprises; and cooperatives.
To support the operation of PT Pos Indonesia as well as to provide postal services all over the country, PT. Pos Indonesia is spreading physical services to all over Indonesia to 11 area divisions.

Figure 3.11 shows that PT. Pos Indonesia (Persero) operation area consists of 11 area divisions, which are divided according to geographic area. Sumatra island is divided into 3 areas, Java into 4 areas, Sulawesi and Kalimantan respectively into 1 area, and other islands merged into 2 areas. Details on the 11 area of PT. Pos Indonesia’s divisions can be seen in table 3.2.
Table 3.2 Area Division of PT. Pos Indonesia (Persero)

<table>
<thead>
<tr>
<th>AREA</th>
<th>REGION</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Aceh and North Sumatra Provinces</td>
</tr>
<tr>
<td>II</td>
<td>West Sumatra, Riau, and Riau Islands Provinces</td>
</tr>
<tr>
<td>III</td>
<td>Bengkulu, Jambi, Lampung, South Sumatra, and Bangka Belitung Provinces</td>
</tr>
<tr>
<td>IV</td>
<td>Special Region of Jakarta and Banten Provinces</td>
</tr>
<tr>
<td>V</td>
<td>West Java Province</td>
</tr>
<tr>
<td>VI</td>
<td>Central Java and Yogyakarta Special Region Province</td>
</tr>
<tr>
<td>VII</td>
<td>East Java Province</td>
</tr>
<tr>
<td>VIII</td>
<td>Bali, West Nusa Tenggara, East Nusa Tenggara Provinces</td>
</tr>
<tr>
<td>IX</td>
<td>South Kalimantan, Central Kalimantan, East Kalimantan, West Kalimantan, and North Kalimantan Provinces</td>
</tr>
<tr>
<td>X</td>
<td>South Sulawesi, Central Sulawesi, Southeast Sulawesi, North Sulawesi, West Sulawesi, and Gorontalo Provinces</td>
</tr>
<tr>
<td>XI</td>
<td>Maluku, North Maluku, Papua and West Papua Provinces</td>
</tr>
</tbody>
</table>

Production data of PT. Pos Indonesia (Persero),

In carrying out its business, PT. Pos Indonesia (Persero), has three product categories, namely:
1. Mail Services, including corporate delivery, special express mail, and express mail.
2. Packet Services, including standard packet and special express packet.
3. International Postal services, including regular international post/, express international post, remailing and EMS.

During 2013-2016, delivery volume of PT. Pos Indonesia experienced up and down. As shown in Figure 3.8 in 2016 there is an increase in mail delivery by 31,010,996 letters and packet delivery increased by 29,865 packets.
6. Broadcasting Operator Data

a) Radio

Regulation of the Government of the Republic of Indonesia Number 50 of 2005 on Private Broadcasting Institution (LPS) Broadcasting Operation, states that LPS is a commercial broadcasting institution in the form of Indonesian legal entity, whose field of business is only to provide radio broadcasting services. In the provision of multiplexing broadcasting, LPS can only broadcast 1 (one) program.

The regulation also states that Broadcasting Provision of LPS is operated through terrestrial systems and/or through satellite systems with the following classifications:

1. Broadcasting through terrestrial systems, including:
   a. Analog or digital AM/MW radio broadcasting
   b. Analog or digital FM radio broadcasting
   c. Penyiaran multipleskning

2. Operation through satellite system, including:
   a. Analog or digital Radio broadcasting
   b. Multiplexing broadcasting.

Until 2017, based on data from Directorate of Broadcasting on the number of radio broadcasting service providers, there are 1,317 radio stations in 33 provinces in Indonesia, with 93% FM-frequency radio, and other 7% AM-frequency radio.

The distribution of LPS radio in 34 provinces in Indonesia is uneven, as most of LPS radios, FM and AM, are located in Java Island with a total of 681 radio or 51.71% of the total number of national radio stations. It is because the population in Java is higher than in other islands. Moreover, business centers and better economy levelin Java islands help LPS radio to support their business continuity. In contrast to the provinces in Java Island, eastern Indonesia, which includes the provinces of Sulawesi, Maluku and Papua, only have 7.41% (or 98 radio stations) of the total number of national radio stations.

Figure 3.13 shows the distribution of LPS radio in every province. The highest number of radio stations is in Central Java (213 radio stations) and the lowest number is in West Sulawesi which only has 1 radio station.
LPS Radio in 34 provinces in Indonesia spreads in the cities of the province, including the Provincial Capital, as the center of provincial government, as well as regencies and municipalities. Figure 3.14 shows that of 1,317 LPS radios spread over 33 provinces in Indonesia, 560 of which are located in provincial capital, and other 57% spread over regencies/municipalities. A total of 757 radio stations in provincial capital indicate that LPS radio are concentrated in government/business centers with large population.

According to Government Regulation Number 51 Year 2005 on Community Broadcasting Institution Operation states that Community Broadcasting Institution is a radio or television broadcasting institution in the form of an Indonesian legal body, established by certain community, which is independent, and non-commercial, with low transmit power, limited range of territories and serves the interests of its community.

The Community Broadcasting Institute provides broadcasting services through a terrestrial system which includes:

a. analog or digital AM/MW radio broadcasting;
b. analog or digital FM radio broadcasting;
c. analog or digital television broadcasting.

Until 2017, there are 62 community broadcasting radios spread over 33 provinces in Indonesia. Figure 3.15 describes the proportion of distribution in 33 provinces in Indonesia, with the highest number in Central Java at 24 radio stations (48%), followed by East Java.
At 14 stations (22.6%), East Kalimantan has 4 stations (6.5%), Lampung, and North Sulawesi 3 stations (4.8%), North Sumatera, Bali and South Kalimantan 2 stations (3.2%), and Nanggroe Aceh Darusalam, West Sumatera, Riau, Riau Islands, South Sumatera, West Java, West Nusa Tenggara and East Nusa Tenggara 1 stations (1.6%). Different to LPS radios which commonly are located in the city center that has good economic condition, most of community radio stations are located in small towns.

On average, 3 new community radio stations emerge each year, except in 2014, there is no new community radio in all provinces in Indonesia.

Figure 3.15 Distribution of Community Broadcasting Institutions Radio Broadcasting Services holding Broadcast Provider License (IPP) According to Region

b) Television

Based on Government Regulation Number 50 of 2005 on Private Broadcasting Institutions (LPS), LPS is organized through terrestrial and/or satellite systems. Broadcasting through terrestrial and satellite systems consists of analog or digital television broadcasting and multiplexing broadcasting. Data regarding to number of LPS television broadcasting services can be obtained at Directorate of Broadcasting. During 2011-2017, there were a total of 127 LPS Televisions in Indonesia. The number has increased to 557 LPS Televisions in 2017.
Based on data from Directorate of Broadcasting, in 2017 there were a total of 557 LPS Televisions which spreads over 34 provinces. Region with many LPS Television are those with good economy, large administrative districts and large populations with relatively high density, such as West Java, Central Java and North Sumatra. However, though Jakarta is not large, the province has a relatively high number of TV LPS.

The top 5 provinces with the highest number of LPS TV stations in Indonesia are East Java (41), West Java (38), Central Java (34), West Sumatra and East Kalimantan (22). These provinces have more than 20 LPS TVs. In addition, the number of LPS TVs in the first three provinces (East Java, West Java, Central Java) reached 28.3% of total LPS TVs in Indonesia. Whileless developed region and new urban areas such as North Maluku and West Papua have relatively small number of LPS TVs. According to data per 2017, both provinces has a percentage of about 1% of total LPS TVsthroughout Indonesia.

According to island region, LPS TV is mostly found in Sumatra and Java. LPS TV in both regions reached 60.86% of total LPS TVs throughout Indonesia. While the regions with the smallest percentage of LPS TV are Maluku and Papua.

The distribution pattern of LPS TVs shows that the eastern region has the smallest number of LPS TVs. It indicates that an area with more advance economic level, higher population density, and larger area, will more likely have higher number of LPS TVs. The distribution pattern of LPS TV also shows that not all large islands with large land areas such as Maluku and Papua have many LPS TVs. Both regions only have about 7.4% of total LPS TVs in Indonesia. It indicates that the number of LPS TVsin a region is not determined by the large of itsland, but is more determined by the economic level, business activities,administrative areas, total population, and population density.
In addition to LPS, Subscription Broadcasting Institutions (LPB) TV also provides TV broadcasting services. The broadcasting operation by LPB TV shall be channelled to direct subscriber using subscription receiving system and only transmitted to the subscribers. Based on the provisions in Government Regulation No. 52 of 2005 on Broadcasting operation of Subscription Broadcasting Institutions, LPB TV consists of subscription broadcasting via satellite, cable, and terrestrial. In distributing broadcast programs to subscriber, LPB uses analog and/or digital systems.

Based on data from Directorate of Broadcasting, in 2017 there are a total of 311 LPB TVs in Indonesia with most of the subscribers (92%) using LPB cable TV. While subscribers who use terrestrial and satellite LPB TV are no more than 8%.

Areas with high number of LPB TVs are generally areas with advance economy, large administrative areas and big population with relatively high population densities, such as in Java and Kalimantan. Distribution of LPB TV television broadcasting services by province can be seen in Figure 3.17.

Based on the figure, the province with the highest number of LPB TV is Jakarta which has 37 LPB TV or 12% of total LPB TV in all regions in Indonesia. The second and third highest LPB TV numbers in Indonesia are Riau 11% and South Sulawesi 8%. While South Sumatra, Bangka Belitung, Bengkulu, Bali, North Kalimantan, Gorontalo, Maluku and West Papua have only 1% of the total number of LPB TVs in all regions in Indonesia for each province.
Figure 3.18 shows that according to islands regions, LPB TV is mostly found in Java (28%), Sumatra (30%) and Kalimantan (21%). The percentage of LPB TV in these three regions reached 79% of total LPB TVs throughout Indonesia. While the region with the lowest percentage of LPB TV is Bali and Nusa which respectively amounted to 3%, and 1%.

If we look further, most LPB cable TV subscribers are found in Java, Sumatra and Kalimantan. The percentage of LPB cable TV providers in each of these three regions is more than 25% which sum to 78% of total LPB cable TV providers in all regions in Indonesia. Meanwhile, there is no LPB cable TV in Bali and Nusa Tenggara (Figure 3.19). In addition to cable media, LPB TV providers also use satellites. Based on data from Directorate of Broadcasting, there are a total of 19 LPB satellite TV. Almost all LPB satellite TV subscribers are in DKI Jakarta (96%).
7. SDDPI Equipment Testing

The results of equipment testing carried out by House of Telecommunication Equipment Testing (BBPPT) is issued in the form of Test Result Report (LHU). The LHU document as test result data is submitted to Directorate of Standardization as a requirement for the issuance of Telecommunication Equipment Certificate. LHU of equipment testing by BBPPT from semester-1 2013 until semester-1 2017 can be seen in Table 3.3.

<table>
<thead>
<tr>
<th>NO</th>
<th>TAHUN</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MEI</th>
<th>JUNI</th>
<th>TOTAL</th>
<th>% NAIK (TURUN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2013</td>
<td>327</td>
<td>232</td>
<td>174</td>
<td>285</td>
<td>280</td>
<td>235</td>
<td>1.533</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2014</td>
<td>258</td>
<td>217</td>
<td>279</td>
<td>313</td>
<td>239</td>
<td>333</td>
<td>1.639</td>
<td>0,07</td>
</tr>
<tr>
<td>3</td>
<td>2015</td>
<td>296</td>
<td>245</td>
<td>290</td>
<td>234</td>
<td>218</td>
<td>120</td>
<td>1.403</td>
<td>(0,14)</td>
</tr>
<tr>
<td>4</td>
<td>2016</td>
<td>37</td>
<td>114</td>
<td>132</td>
<td>196</td>
<td>179</td>
<td>275</td>
<td>0.933</td>
<td>(0,33)</td>
</tr>
<tr>
<td>5</td>
<td>2017</td>
<td>265</td>
<td>220</td>
<td>156</td>
<td>145</td>
<td>187</td>
<td>136</td>
<td>1.109</td>
<td>0,19</td>
</tr>
</tbody>
</table>

Table 3.4 shows that the Test Result Report (LHU) in the second semester of 2017 reached its peak in November 2017 with 314 LHU, while the lowest was in August 2017 with only 208 LHU. Overall, the total LHU issued by BBPPT in the 2nd semester of 2017 has increased compared to the 2nd semester of 2016 of 12.30%.

Table 3.4 Test Result Report (LHU) from semester 2, 2013 until 2017.

<table>
<thead>
<tr>
<th>NO</th>
<th>TAHUN</th>
<th>JULI</th>
<th>AGS</th>
<th>SEPT</th>
<th>OKT</th>
<th>NOV</th>
<th>DES</th>
<th>TOTAL</th>
<th>% NAIK (TURUN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2013</td>
<td>392</td>
<td>184</td>
<td>316</td>
<td>280</td>
<td>320</td>
<td>333</td>
<td>1.825</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2014</td>
<td>261</td>
<td>245</td>
<td>290</td>
<td>296</td>
<td>272</td>
<td>311</td>
<td>1.675</td>
<td>(8,22)</td>
</tr>
<tr>
<td>3</td>
<td>2015</td>
<td>237</td>
<td>271</td>
<td>268</td>
<td>155</td>
<td>352</td>
<td>340</td>
<td>1.623</td>
<td>(3,10)</td>
</tr>
<tr>
<td>4</td>
<td>2016</td>
<td>154</td>
<td>226</td>
<td>260</td>
<td>272</td>
<td>225</td>
<td>221</td>
<td>1.358</td>
<td>(16,33)</td>
</tr>
<tr>
<td>5</td>
<td>2017</td>
<td>228</td>
<td>208</td>
<td>286</td>
<td>266</td>
<td>314</td>
<td>223</td>
<td>1.525</td>
<td>12,30</td>
</tr>
</tbody>
</table>
The definition of PPSE is any person, state organizer, Business Entity, and public that provides, manages and/or operates the Electronic System individually or jointly for Electronic System Users for their own and/or other parties’ purposes. PPSE is based on the provisions stipulated in Regulation of the Minister of Communication and Information Technology Number 36 of 2014 on Procedure of Registration of Electronic System and Transaction Operator (PSTE).

**Figure 3.21 Number of Electronic Systems Operator Registered in MCI PSE**

**REGISTRATION OF ELECTRONIC SYSTEM OPERATOR (PSE)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>15</td>
</tr>
<tr>
<td>2016</td>
<td>162</td>
</tr>
<tr>
<td>2017</td>
<td>359</td>
</tr>
</tbody>
</table>

A total of: 536 (Lima Ratus Tiga Puluh Enam) electronic systems have been verified by MCI PSE.

The objectives of PSE as follows:

1. To realize the implementation of reliable, secure, and accountable electronic systems and transactions (TRUSTED);
2. To provide prompt, responsive, accurate, transparent and accountable services to the public;
3. To promote the improvement of quality of electronic systems and transactions;
4. To increase the participation and public trust in the utilization of ICT.

Ministry of Communication and Informatics together with E-Commerce Association of Indonesia (idEA) signed a Memorandum of Understanding for the cooperation of Electronic System Registration (PSE) services. PSE registration is conducted at Ministry of Communications and Informatics and idEA.
By creating and building a Digital Startup ecosystem where operator can get new business, investor may have investment opportunity in potential Startup Digital company and new business network through branding/promotion. In 2018 government will also implement strategy of mentoring and intensive coaching through systematic steps in 10 cities.
Broadcasting Industry Efficiency

The development of broadcasting technology demands TV and radio industry for having strategy development. Therefore, the Government is developing innovation in efficiency of broadcasting industry so that broadcasting industry can adapt to technological developments. In 2018, measures taken by Ministry of Communications and Informatics related to Efficiency of industry are as follows:

a. Regulating Licensing for Foreign Broadcasting Institutions that will operate in Indonesia.

b. Regulating Broadcasting Operation

c. Simplifying regulation related to Licensing Data, License Fee, Network Station System, and developed Area and Less developed Area in Broadcasting Operation

d. Mapping the broadcasting of Radio and Television Community Broadcasting Institutions

In order to provide broadband access services to areas that are listed in universal service obligations or Universal Service Obligation (USO) Ministry of Communications and Informatics conducted procurement of multifunctional satellite. In order to support the implementation of the procurement, Ministry of Communications and Informatics made preparations related to procurement of multifunctional satellites through supporting activities such as:

a. final business case and market sounding in 2017

b. auction of business entities, determine the winner, and signing contract/agreement in 2018.

c. financial close and construction in 2019

Feasibility Study and Procurement of Multi-Function Satellites

In order to meet the needs of telecommunication access in Indonesia, especially high speed internet network, Ministry of Communications and Informatics is building national fiber optic backbone network that connects districts in the West, Central and East. In 2018, continuing the previous year, Ministry of Communications and Informatics will complete the project in 5 Capital of Regency and Municipality (IKK) for West Package and 17 Capital of District and Municipality (IKK) for Central Package. It is expected that the project in 22 Regencies/Municipalities will be completed in 2018.

Palapa Ring

In order to meet the recording of transactions and information on credit distribution to all communities in rural and remote areas in Indonesia Ministry of Communications and Informatics has launched the Pilot Project for Financial Inclusion. In 2018, the government will prepare Standard/Platform in the implementation of Digital Financial Inclusion (DFI) which will be applied to manage financing in ultra micro business.
Development of Last Mile in villages in 3T area

Prepared the auction process to determine the telecommunication infrastructure provider to perform the construction of 3,900 BTS in priority locations of 5,135 villages in 2018.

Selecting infrastructure provider by adjusting the capacity needed to achieve BTS development targets by 2018.

Signed a cooperation agreement with selected infrastructure provider in order to ensure the commitment of the provider in order to achieve the target of building 3,900 BTS at Location Priority of 5,135 villages.

The construction of 3,900 BTS at priority location of 5,135 villages will start in early 2018 and is targeted to be completed by the end of 2018. The construction is divided into 8 areas and will be monitored every year to improve the transmission and coverage.

Integrated broadband village Solution

Appropriate provision of network, device, application, and capacity building (NDACb) in communities in 3T areas and Priority locations (LokPri), which are divided into farmer villages, fishing villages and rural villages, can help increase productivity, provide access to markets/marketplace to get the best selling price in order to improve their welfare.

Those who benefited from this program are:

- Community in 500 3T areas and Priority locations (LokPri).
- Ministries/institutions/agencies, Village Governments and Villagers.
- Telecommunication operator

The Integrated Broadband Village Solution (SDBT) program is expected to benefit communities in 3T area and Priority locations (LokPri) which consists of: farmer villages, fishing villages and rural villages, to improve productivity, quality and sales. Integrated Broadband Village Solutions (SDBT) program is implemented gradually i.e., the implementation of piloting process in 2017, the implementation in 300 villages in 2018 and the implementation in 200 villages in 2019 which is divided into farmer villages, fishing villages and rural villages.
MCI do not only passively receive complaint/report about negative content in virtual domain. On 3 January 2018 MCI launched “Ais” crawling engine, an engine to actively accelerate the process of crawling negative content that was previously conducted manually. With artificial intelligence (AI) it is expected that more negative content would be blocked more massively and effectively. The Ministry will implement several work methods, such as:

1) Acceleration on screening of pornography and gambling
2) Cyber patrol
3) AIS joint use for all sector and law enforcement agencies.

The target for cyber patrol and acceleration of negative content blocking in 2018 is 60 thousand contents.

In 2018, after the movement has been executed for 3 years, MCI will facilitate the implementation of four digital startup programs that will run in parallel until 2020, namely:

1) Create a Master Plan for the Establishment of Non-Profit Entities of 1,000 Digital Start-ups
2) Facilitate Single Operator Program
3) Facilitate Multi Operator Integrated Program
4) Facilitate Acceleration Corporate Program.

By creating and building a Digital Startup ecosystem where operator can get new business, investor can get investment opportunity in potential Startup Digital company and new business network through branding/promotion. In 2018 will also be implemented strategy of mentoring and intensive coaching through systematic steps in 10 cities.
In Farmer Go Online, MCI is actively collaborating with ICT Industries in agricultural sector and related stakeholders to increase productivity and to boost economic growth opportunity in order to make Indonesia an independent nation with high competitiveness through the utilization of ICT, such as: online agricultural market application, Online Counseling application, and National Stock Information Application. Farmer Go Online in 2018 target farmers of corn feed, onion, chili and soybean in West Java, Central Java, East Java and West Nusa Tenggara.

For Fishermen Go Online MCI is actively collaborating with Ministry Of Marine Affairs And Fisheries as well as developer of marine and fishery sector application to increase productivity in order to boost economic growth opportunity to make Indonesia an independent nation with high competitiveness through utilization of ICT (application for basic information on fishery and online marketplace).

Fishermen Activities Go Online in 2018 targets both capture and aquaculture fishermen in East Kalimantan, Lampung, Maluku, Riau Islands, West Java and Banten.

The target for 2018 is 400,000 farmers and fishermen.

The implementation of Electronic Signatures and Digital Certificates can be realized with a secure Root CA that give trust to the CA as a trusted Digital Certificate publisher.

The output target of this program is the operation of root CA, as well as the certification of 2 (two) CA. While the target of digital certificate outcome issued in this program is 600,000 certificates, which will be granted to government officers and public.
National E-Government

A nationally integrated online license service is established in 2018. Its integration is based on Online Single Submission by using Si Cantik. The benefit of this service for the community is to ease submitting applications at one online site for various public services.

Government internal office service is supported with e-office application, Maya. Cloud-based Maya application has been jointly used by 277 central and local government agencies by the end of December 2017. By 2018 it is expected that Si Maya users will increase by 80 agencies nationwide. The prospective user of this application is prioritized to be from local government in Sulawesi.

8 Million SMEs Go-Online

In order to reach 8 million MSMEs Go Online, in 2018 MCI again will conduct MSMEs Go Online Education in cooperation with Local Government and Marketplace. The government targets 15,000 MSMEs Go Online through the following steps:

a. Coordination on MSMEs Education Go Online with Marketplace, IDEA, Local Government, Ministry of Cooperative and MSMEs, Ministry of Industry, Ministry of Trade, Coordinating Ministry for Economic Affairs, PT Komunikasi Indonesia, and Ministry of State Owned Enterprises.

b. The Cooperation Agreement which is conducted with various relevant stakeholders to encourage MSMEs to go online.

c. MSMEs Go Online Education is conducted in cooperation with Local Government and Marketplace such as Blibli, shopee, Lazada, Nurbaya, Bukalapak, Tokopedia, and Mataharimall.
Public service automation consists of developing licensing systems, certification, and online registration for MCI public services, as well as public service infrastructure, such as the provision of one-stop integrated services and call center. The objective of this program is to create a prompt, simple and transparent service. In 2018 MCI will conduct several activities as follows:

**Public Service Automation**

In order to support the Migration of Television Broadcasting System from analog to digital MCI will develop policy/regulation as follow:

a. Guide on Digital blueprint
b. Opportunity for Digital TV broadcasting services operation.
c. Multiplexer implementation model as output of analog TV moratorium.
d. Draft regulation on MUX tariff
e. Adjustment of Broadcasting License from analog TV to Digital TV
f. Draft of moratorium policy of Television Broadcasting Institution
g. Draft Policy on Television Service through cable network
It is expected that public service automation programs can promote an efficient, prompt, and transparent public service process and increase non-tax state revenues ("PNBP").
ANNUAL REPORT
2017
MINISTRY OF COMMUNICATION AND INFORMATICS
Jl.Medan Merdeka Barat No.-9 Jakarta 10110