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# **OVERVIEW OF INDONESIA SPECTRUM POLICY ON DIGITAL DIVIDEND (Progress and Challenges)**

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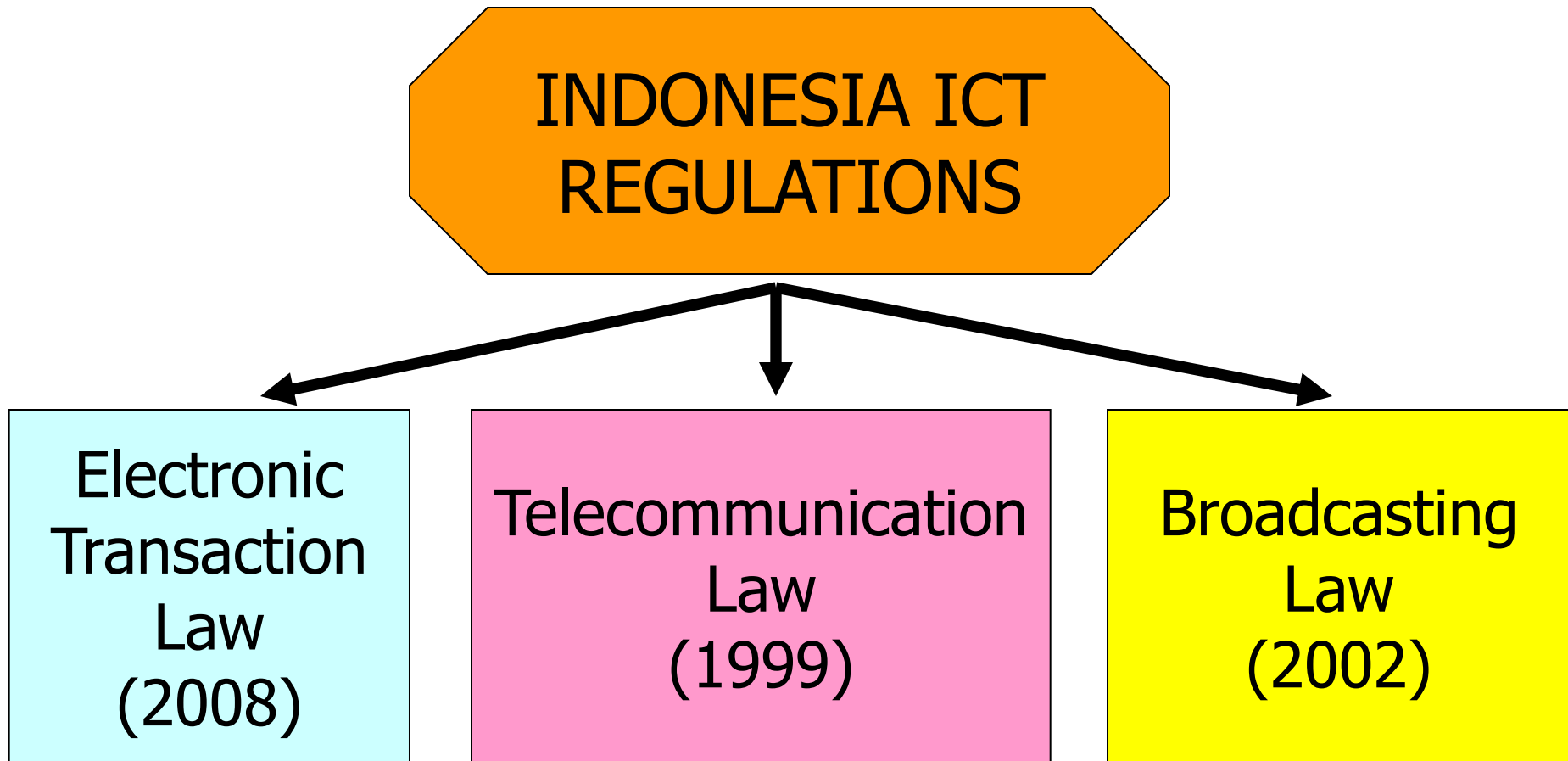
**Directorate General of Posts and Telecommunications**  
**Ministry of Communication and Information Technology**  
**Republic of Indonesia**  
**2010**

1. Overview of DGPT Structure
2. Existing Condition of Band IV and V UHF
3. Digital Dividend Policy Principles
4. Progress of Digital TV Migration
5. Challenges in Refarming 700 MHz band

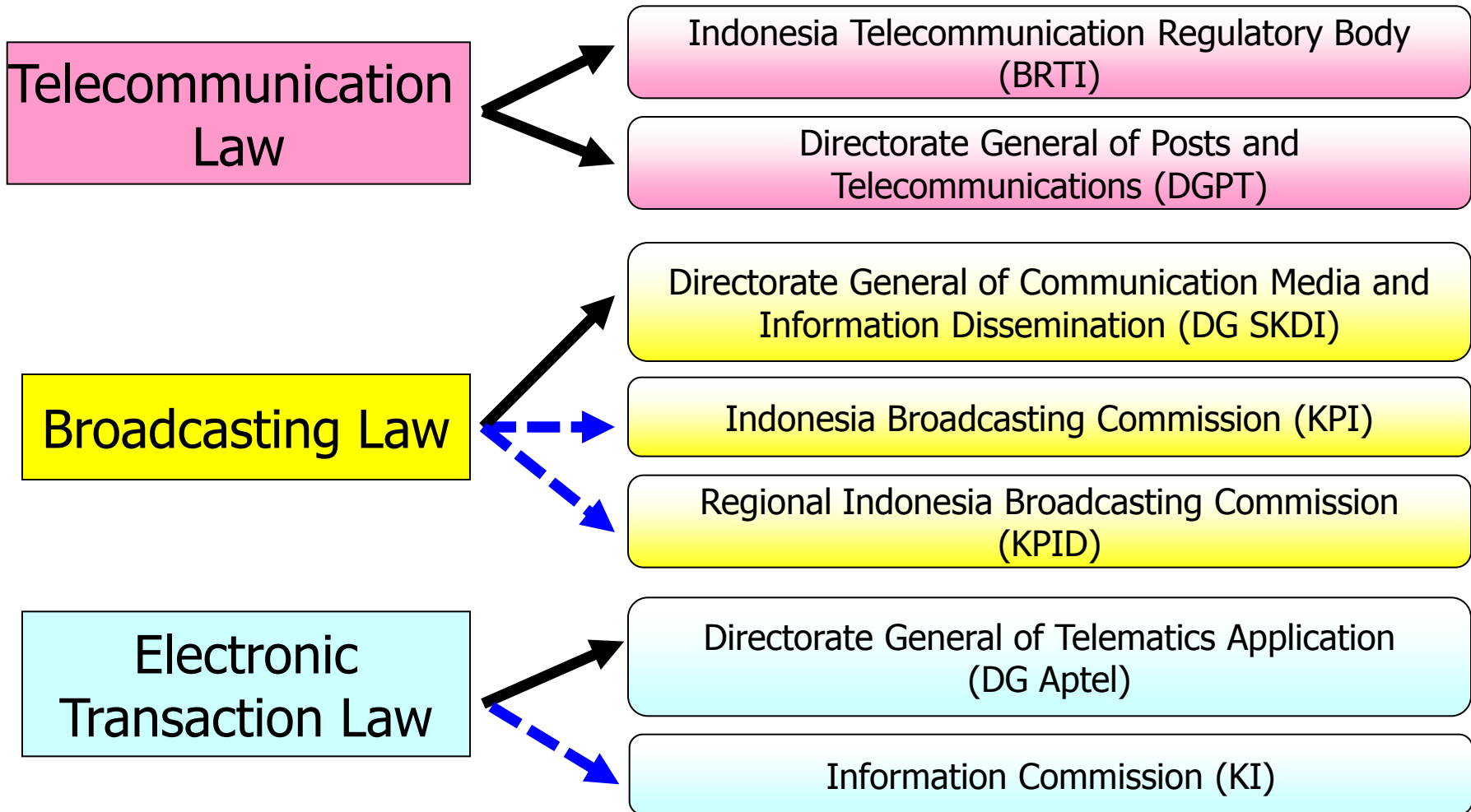
# OVERVIEW OF DGPT STRUCTURE



1. Areas of Regulation
2. Regulations and Regulator's Purview
3. Structure of DGPT



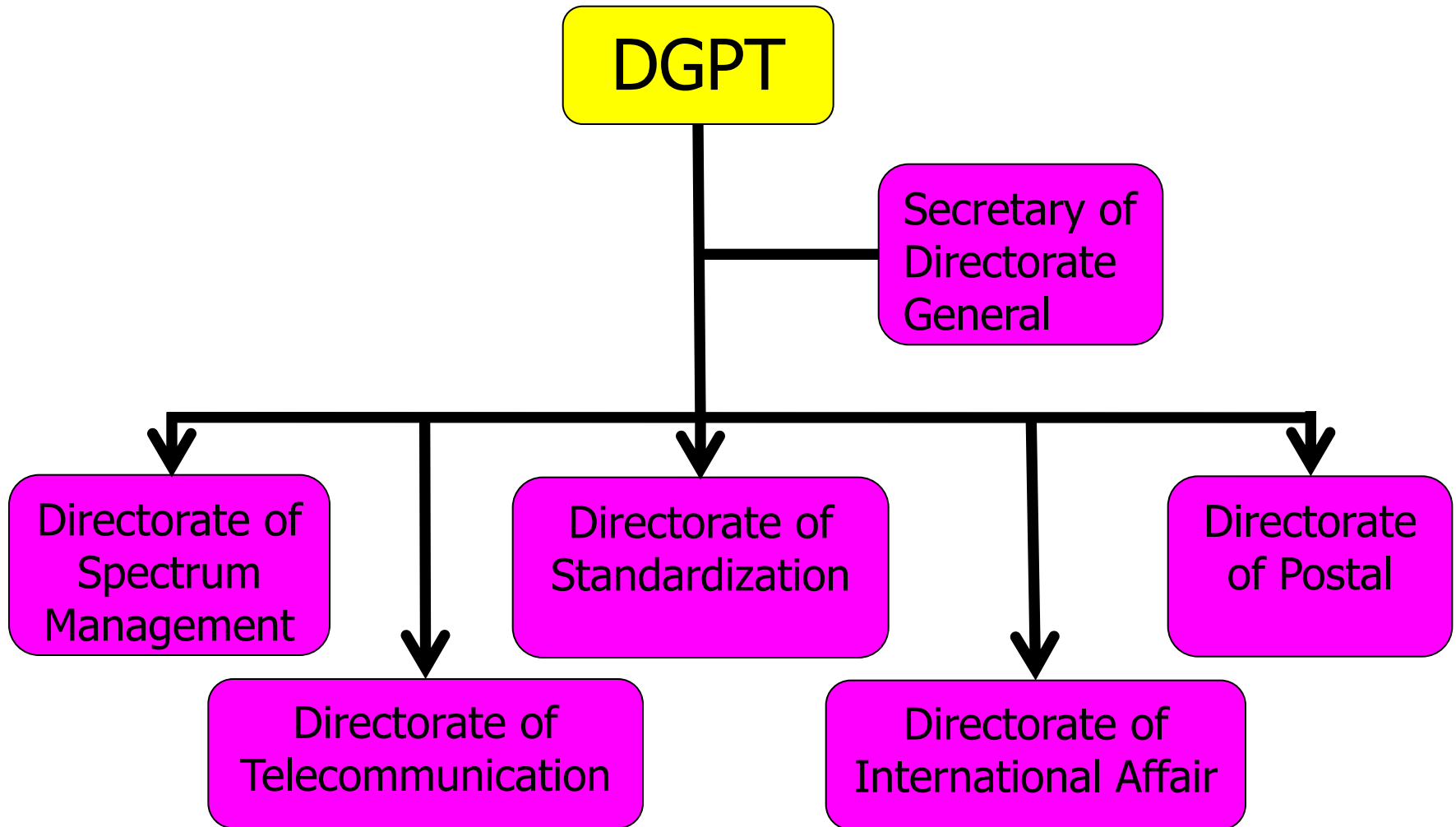
# REGULATIONS AND REGULATOR'S PURVIEW



UNDER THE MINISTRY OF COMMUNICATION AND INFORMATION TECHNOLOGY



# STRUCTURE OF DGPT



# EXISTING CONDITION OF BAND IV AND V UHF



1. Horizontal Licensing in Analog Broadcasting
2. Current Band Plan Arrangement for 470 – 806 MHz
3. Current Analog Broadcasting Service Condition in 478 – 806 MHz Band
4. New Applications for TV and Radio

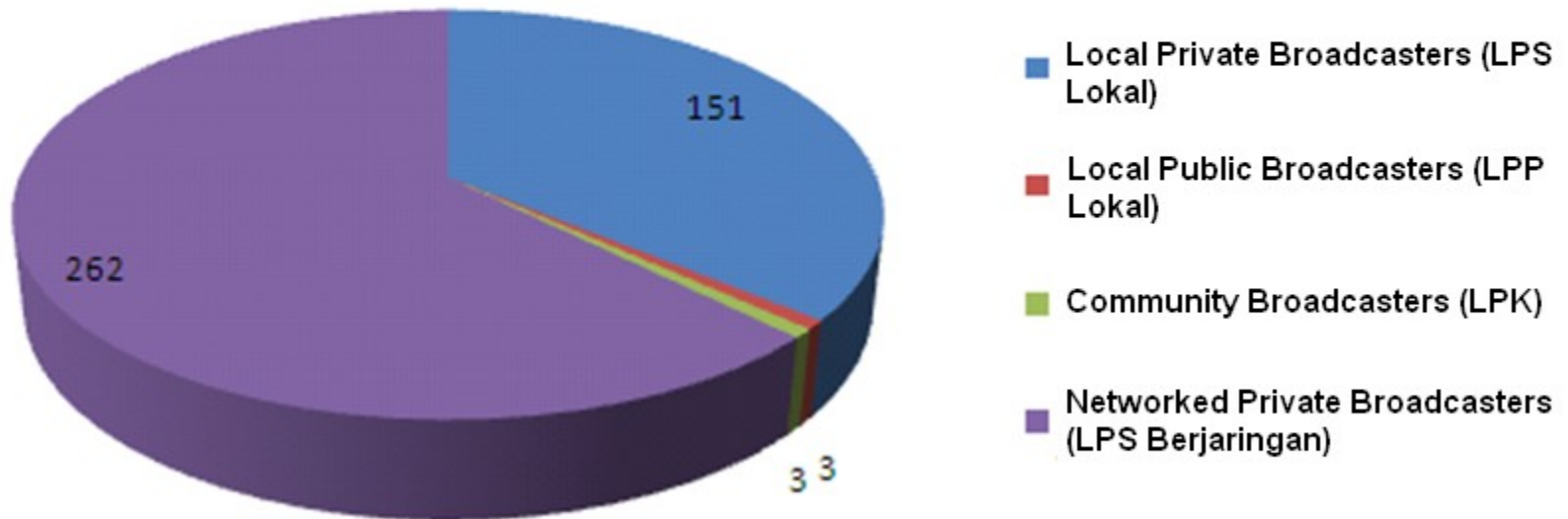
1. Licensing for analog broadcastings in Indonesia is based on horizontal licensing. It means that every broadcaster has 2 licenses one is a license for conducting broadcasting services and another is a license for using the frequency.
2. In term of content compliances, broadcasters must also have a recommendation from the Indonesian Broadcasting Commission (KPI) or Regional Indonesian Broadcasting Commission (KPID).
3. This licensing scheme result an interception between Telecommunication Law and Broadcasting Law, specifically in the use of radio frequency. Therefore, DGPT as frequency/telecom regulator must coordinate with DG SKDI as broadcast service regulator and KPI or KPID as the content regulator.
4. It can be concluded that the relationship between DGPT, DG SKDI, KPI, and KPID is in the scope of coordination/cooperation.

# CURRENT BAND PLAN ARRANGEMENT FOR 470 – 806 MHz

1. According to Radio Regulations 2008, frequency range 470 – 806 MHz in Region 3 is allocated for FIXED, MOBILE, and BROADCASTING services (capitalized because all of these services are primary services). Limited in the range 585 – 610 MHz, there is also additional allocation for RADIONAVIGATION services.
2. Indonesian policy for frequency range 470 – 806 MHz (Ch. 21 – 62 UHF) is to separate this range into 2 kind of services, those are :
  - Land mobile services and point-to-point communication (Ch. 21 UHF) ;
  - Broadcasting services (Ch. 22 - 62 UHF)
3. Broadcasting services that is assigned until now (September 2010) in ch. 22 – 62 UHF is analogue TV services using PAL-G standard which occupied 8 MHz bandwidth per Transmitter.

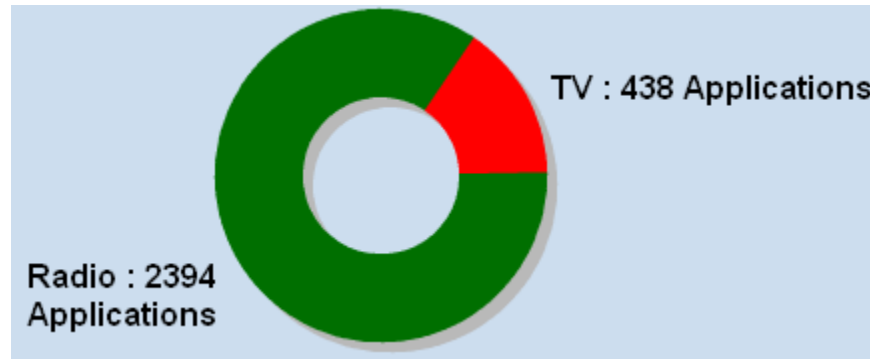
# CURRENT ANALOG BROADCASTING SERVICE CONDITION IN 478 – 806 MHZ BAND

## CHANNEL USAGE OF UHF BAND FOR ANALOG TV

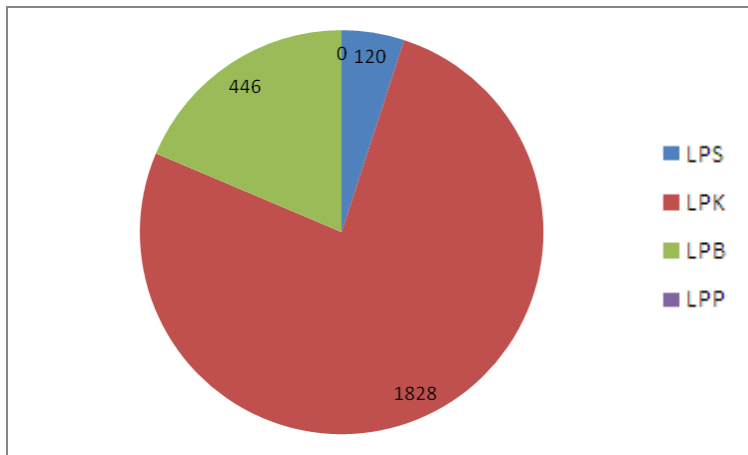


Data per June 2010

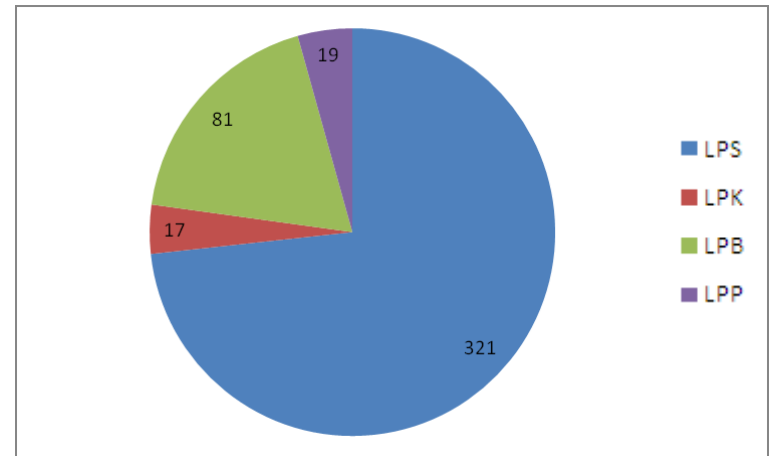
# NEW APPLICATIONS FOR TV AND RADIO



Radio  
New Applications



TV  
New Applications



Data per September 2009

# DIGITAL DIVIDEND POLICY PRINCIPLES



1. Increase the Efficiency of Spectrum → **Benefit**
2. Digital Broadcasting as a Convergence Milestone
3. Opportunity of Applying New Services → **Benefit**

Spectrum dividend based on EU-COM at RRC-06 (September 2005) :

*“The spectrum dividend is understood as the spectrum made available over and above that required to accommodate the existing services in a new, more efficient form by applying new transmission and coding techniques”*

Digital dividend is a type of spectrum dividend which in RRC-06 was illustrated as below :

Transition from Analogue TV to DTTV (DVB-T), finished by 2015 (EU: 2012)

Analogue TV Plan (ST61):  
3 - 6 nationwide coverage layers



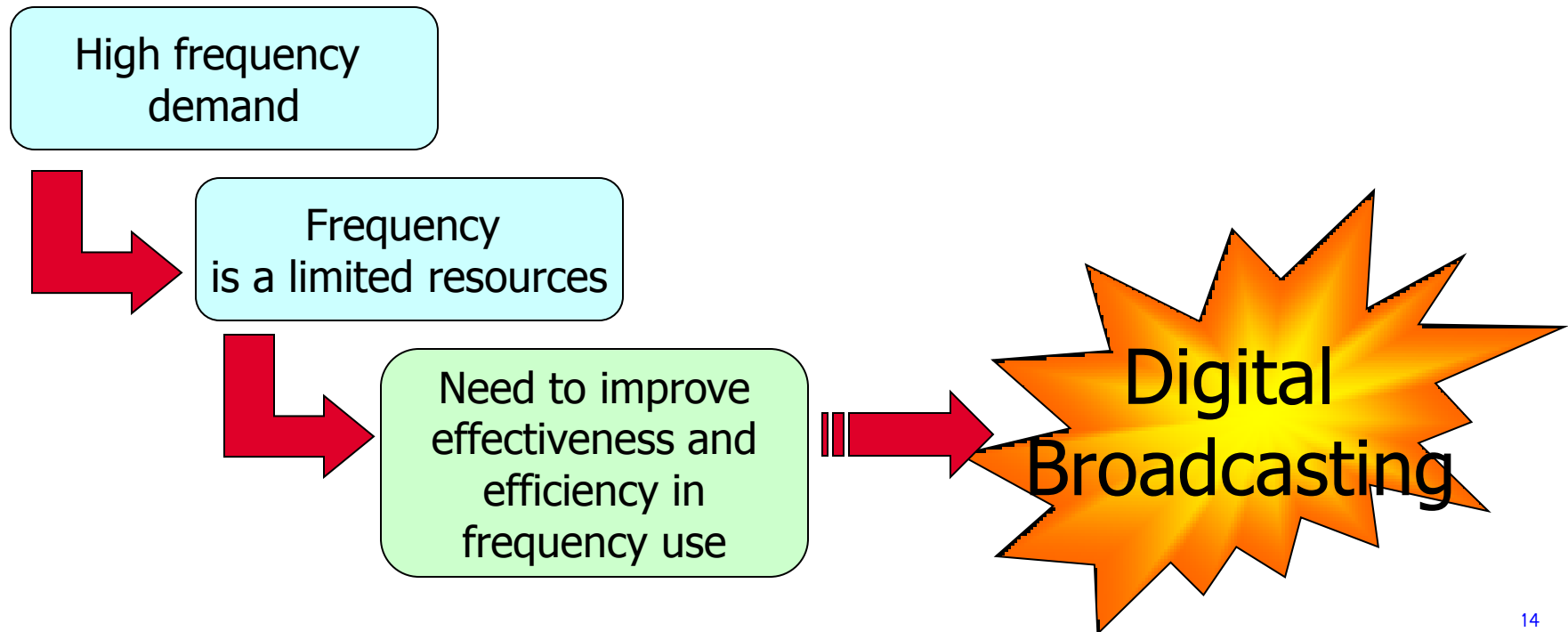
Can be accommodated in 1 – 2 DVB-T MUX:  
7 – 14 channels in new Digital Plan (GE06)

According to EU definition: 75 – 80% dividend

# INCREASE THE EFFICIENCY OF SPECTRUM

From previously explained facts of new applications, it is obviously can be seen that demand for frequency in broadcast services is so high. However, we all known already that frequency spectrum is a limited resources. Hence, it comes the immediate need to increase the effectiveness and efficiency in frequency use.

And, fortunately, digital broadcasting technology provide those requirements.

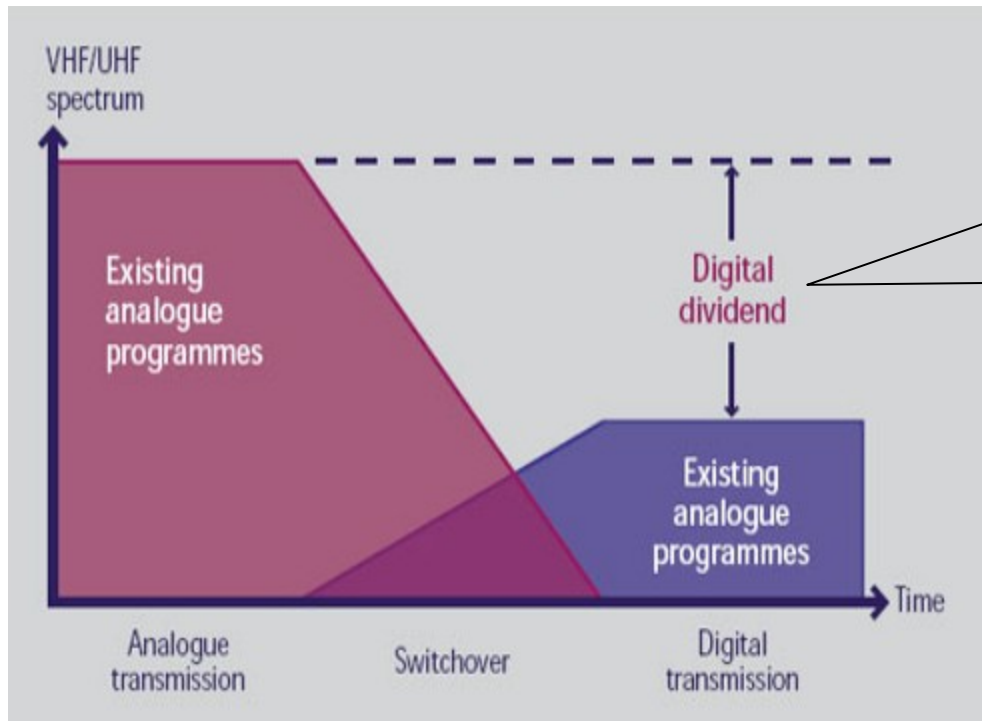


# DIGITAL BROADCASTING AS A CONVERGENCE MILESTONE

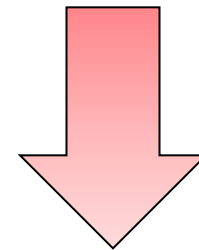
The implementation of vertical licensing practiced in digital broadcasting is planned to be the milestone of a more rapid regulatory and policy actions in conducting convergences.

The key is the licensing separation between service licensing and infrastructure licensing, known as vertical licensing. This allows the infrastructure provider to provide its transmission capacity for many kind of services.

# OPPORTUNITY OF APPLYING NEW SERVICES



opportunity to respond to the growing demand for new wireless communication services



Include delivery of ubiquitous broadband Internet access to areas not yet reached by landlines, thus helping to **overcome the digital divide**. Example of new services : mobile communications and Broadband Wireless Access (BWA) systems

# PROGRESS OF DIGITAL TV MIGRATION

1. March 2007 : Decided to use DVB-T as national standard for DTTB
2. August 2008 : Trial soft launching by Vice President of Indonesia
3. May 2009 : Trial grand launching by President of Indonesia
4. 2009 – 2010 : Field trial by 2 consortiums
  - a. 2.500 Set - Top Boxes (STB) distribution to the viewers in the service area of the field trial ;
  - b. Conducting surveys with 1.017 respondents (working hand in hand with AGB Nielsen and University of Indonesia) in which the results are as follows :
    - ✓ 62% of respondents “very satisfied” and “satisfied” to DTTB services
    - ✓ 84% of respondents said that digital TV is better than analog TV
    - ✓ 73% of respondents agreed of using STB in their analog TV to get digital TV signal.

# CHALLENGES IN REFARMING 700 MHZ BAND

1. Difficult to convince the broadcasting authorities to conduct the auctions for granting the spectrum.
2. Difficult to negotiate with broadcasting industry to release analog TV spectrum in near future.
3. Channels in band IV and V UHF are heavily used by existing analog TV broadcasting services.

Thank You

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