



Thailand Convergence Regulator: NBTC

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*Commissioner
The National Broadcasting
and Telecommunications Commission (NBTC)*

The National Broadcasting and Telecommunications Commission or NBTC is an independent state regulatory body which was established under the Act on Organization to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunication Services B.E. 2553. The NBTC has been graciously appointed by His Majesty the King on October in, 2011 to allocate the nation's radio frequency and regulate broadcasting and telecommunications sectors for the benefit of the country and the public.



NBTC's Policy in frequency allocation for the maximum benefit for the Thai people

- 1) Frequency Allocation:** fairly allocating frequency and promoting its utilization efficiently for the maximum benefit of the public and the nation.
- 2) Licenses granting:** focusing on fair competition and preventing monopoly that could lead to unfair competition.
- 3) Regulations:** encouraging market mechanism and promoting competition under fair regulations for the maximum benefit of the public for accurately, fast and fair quality of service.
- 4) Universal Service Obligation:** promoting universal broadcasting, television and telecommunication services nationwide.
- 5) Consumer Protection:** setting measures for the public to have access to various high quality ranges of broadcasting and telecommunications services under reasonable prices.

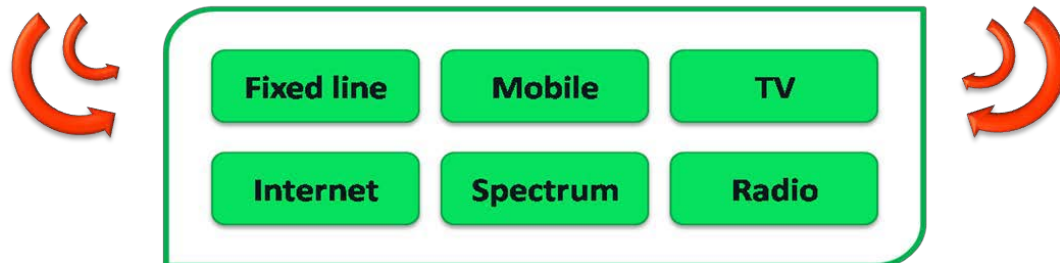
Roles & Missions

Organization Act 2010



NBTC's Roles:

- Spectrum Management
- Telecoms Regulator
- BroadcastingRegulator



Organization Chart

Chairperson
National Broadcasting and
Telecommunications Commission

Chairperson
Broadcasting Commission

Chairperson
Telecommunications Commission

Broadcasting
Commissioner

Broadcasting
Commissioner

Broadcasting
Commissioner

Broadcasting
Commissioner

Telecom
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Commissioner

Thai Broadcasting Law

Broadcasting Act

✓ Broadcasting Licenses

- Non-Frequency based broadcasting services
- Frequency based broadcasting services
 - Community Service
 - Public Service
 - Commercial Service

✓ Broadcasting Regulation

✓ Consumer Protection

✓ Broadcasting Sector Development

Broadcasting Act

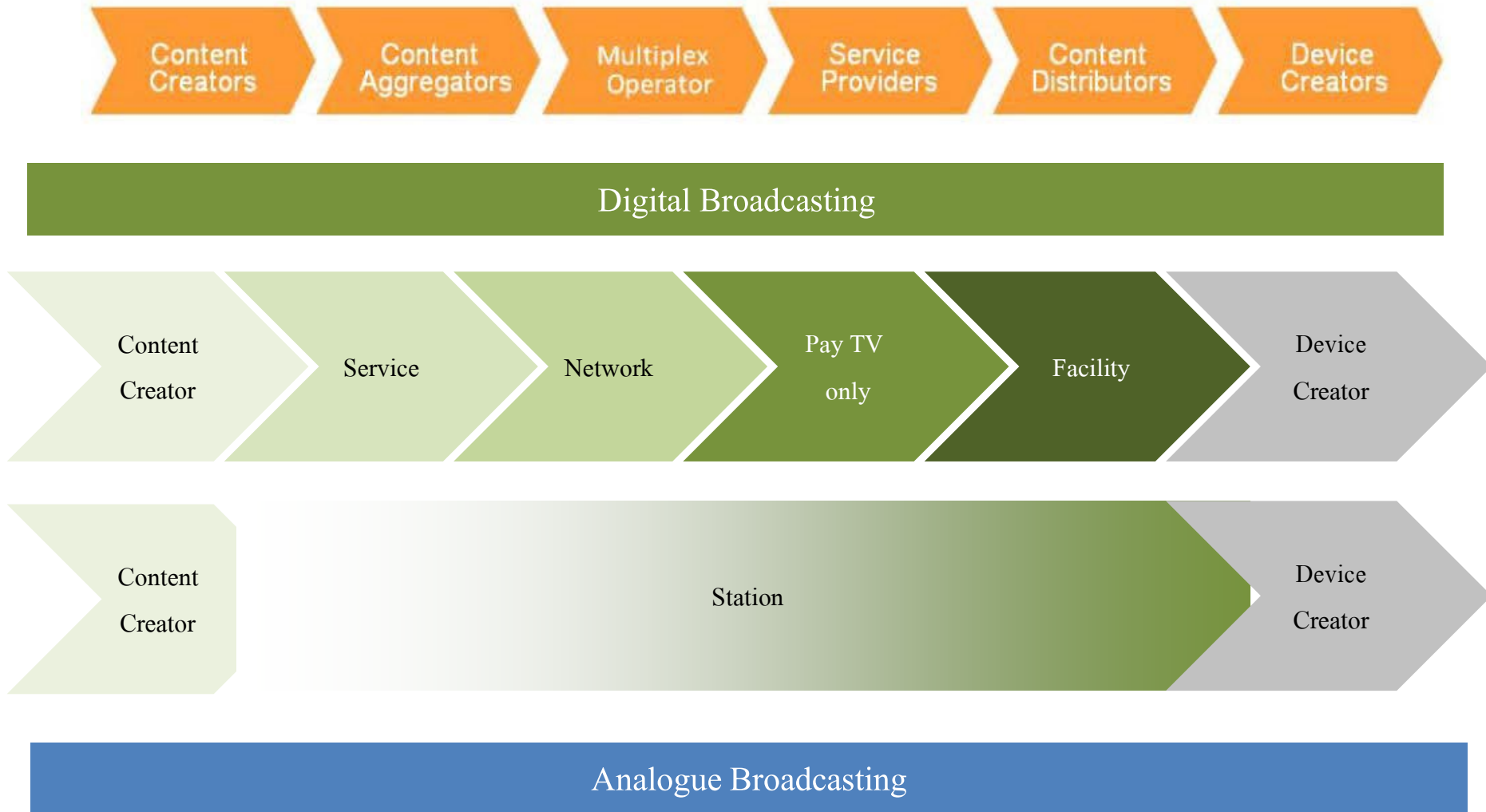
- ✓ **Spectrum Allocation Method**
 - Commercial Service: Auction
 - Community and Public services: Beauty contest
 - Auction Revenue: Broadcasting Development Fund
- ✓ **Broadcasting Law does not indicate:**
 - Networks or Infrastructure Licenses
- ✓ **Require transition to licenses system**
- ✓ **Services:**
 - Free Service
 - Subscription Service

NBTC Regulations

NBTC Regulations:

- ✓ **There is no regulation for broadcasting sector in Thailand almost 15 years**
- ✓ **Support old analog/incumbent operators (government organizations & concessionaries) – before transition**
- ✓ **Support new Digital/license broadcasting system**
- ✓ **Within scope of Broadcasting Law**

Digital Value Chain



Digital Broadcasting Licenses

Facility

Facility for all network



Network

Network for all services



Service

Service

Service

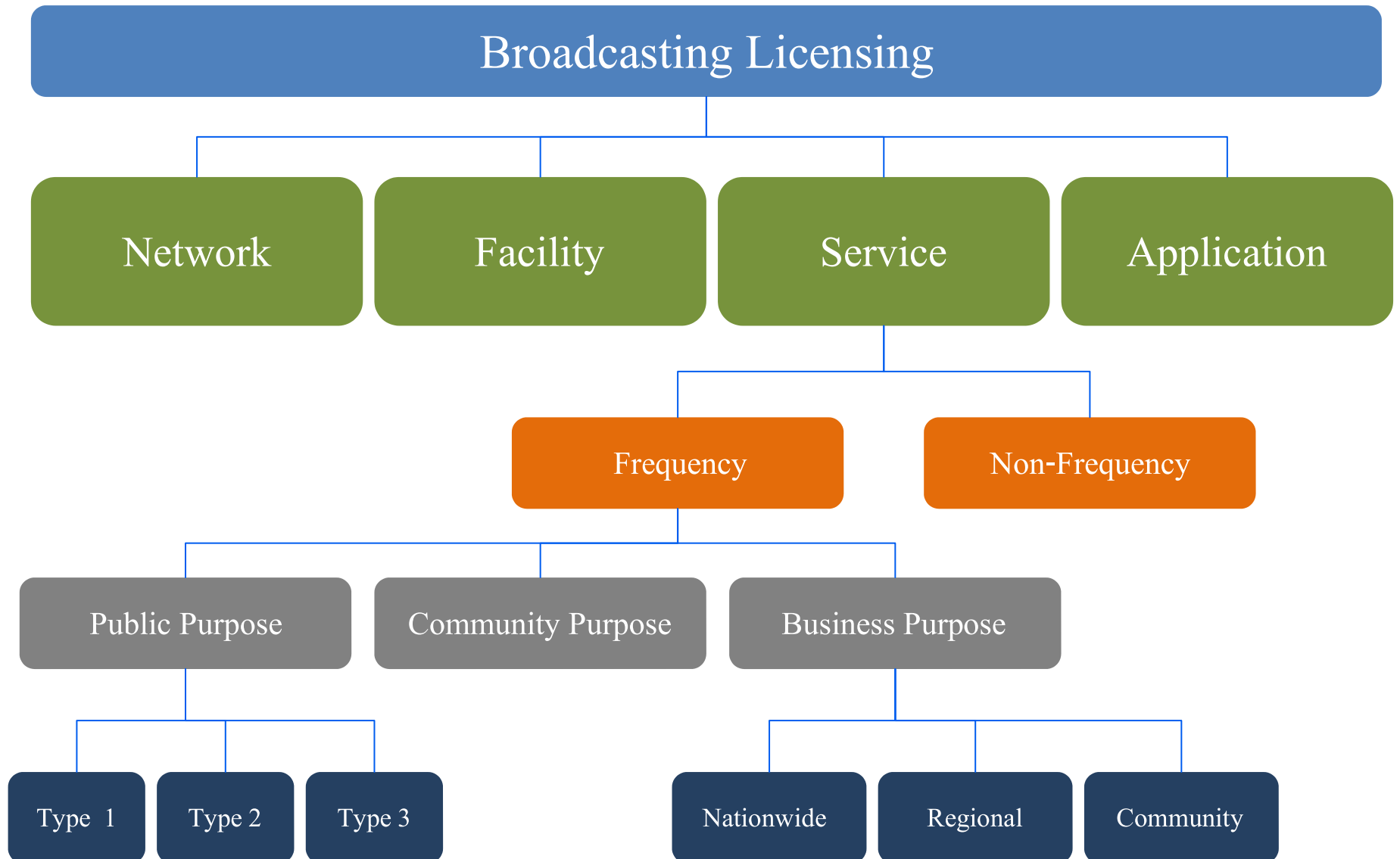
Service

Service

Service

Service

Licensing Scheme



Licensing Scheme

The number of broadcasting licenses

(As of Feb 27, 2014)



Radio (commercial ,public , community) :

4,012 licenses



Satellite and cable TV: 736 channels

Network operators : 402 licenses

Facility operators : 5 licenses



DTT Network operators: 5 licenses

Commercial DTT channel operators : 24 licenses



Important NBTC Regulations:

✓ Types/Categories of Broadcasting Licenses:

- ✓ Infrastructure/Networks/Services/Applications Licenses
- ✓ Operating Right: Networks License
- ✓ Spectrum/Broadcasting Right: Service License
- ✓ Applications Licenses to support future convergence
- ✓ Free Services: Must Carry and Must have**

Digital Switch Over: DSO

Milestones

- Digital Roadmap: Feb. 2012
- DTTB standard Adopted: DVB-T2 in June 2012
- Regulations: 2012
 - DTTB Transition Plan
 - DTTB Transmitter Technical Standard
 - Minimum DTTB Receiver Technical Standard
 - Radio Frequency Planning for DTTB
- Regulations: 2013
 - Issue Facility Licenses
 - Issue Network Service Licenses
 - Issue Service Licenses – Commercial (by Auction)
- Regulations: 2014
 - Issue Service Licenses – Public (by beauty contest)
 - DSO transition support programs e.g. Subsidization by issue coupons to every households (22M households)



Digital Switchover Status in Thailand

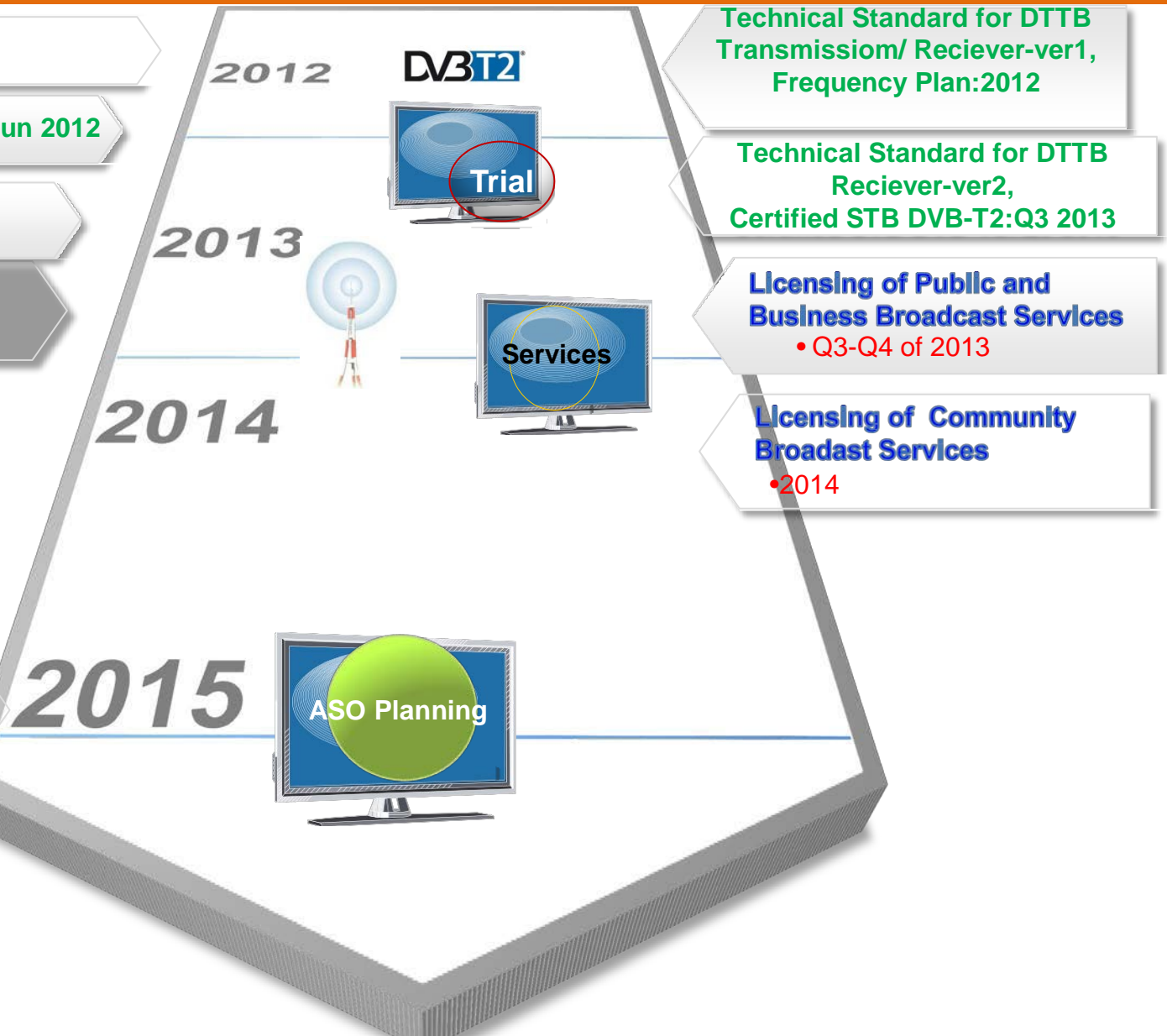
Digital Roadmap : Feb 2012

DVB-T2 Standard Adopted : Jun 2012

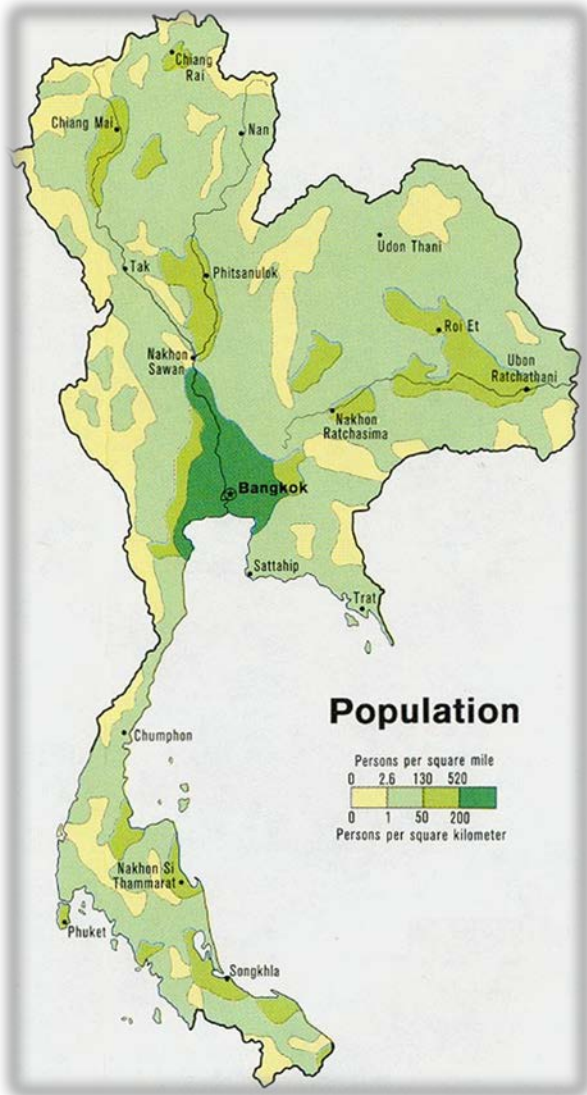
Digital TV Trail : Q1 2013

Facility/ Network Licensing:
Jun 2013

Start Analog Switch-off
Planning Process



Regulations on Network Providers & Receivers



- Coverage Requirements
 - Network Obligations:
 - Year 1: > 50% of households
 - Year 2: > 80% of households
 - Year 3: > 90% of households
 - Year 4: > 95% of households
 - **Portable indoor reception mode** in Urban areas
 - 20 percent of MUX Capacity for Community TV service
- Mandating the Digital Receivers



iDTV



Set-top-box

Commercial Spectrum Allocation - Auction Design -

General Auction Design

- ✓ Simple 60 min. e-Auction + 5 min. extension
- ✓ Additional Specific Rule for each auction
- ✓ Require spectrum valuation for starting and reserve prices
- ✓ Multiple licenses in each round



Auction Design: DTT Commercial Services

✓ Specify 48 programs for DTT

- 12 Community
- 12 Public
- 24 Commercial



✓ Categorize 24 Commercial programs into 4 groups:

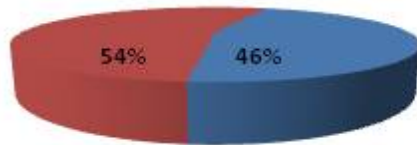
- 3 Kids
- 7 News
- 7 Variety SD
- 7 Variety HD



Auction Design: DTT Commercial Services

- ✓ **Spectrum Valuation by several organizations/ Starting = Reserve price**
 - Kids : 4.25 M USD
 - News : 6.65 M USD
 - Variety SD : 11.50 M USD
 - Variety HD : 45.75 M USD
- ✓ **4 rounds auction, one for each group**

Platform based market share



■ Terrestrial ■ Cable + Satellite

- 8.7 million households (54%) viewing by Terrestrial TV
- 10.3 million households (46%) viewing Cable + Satellite

Source : AGB Nielson

DTT channel numbers



Auction Result

- Kids : 19.6/20.2 M USD
- News : 39.3/40.5 M USD
- Variety SD : 66.7/ 71.4 M USD
- Variety HD : 100.6/107 M USD
- Total revenue of 1,541 M USD
(compare to reserve price of 460 M USD)

Digital Switch Over: DSO

- ✓ Revenue from Auction go to Broadcasting Development Fund
- ✓ NBTC have agreement with Fund Committee to have some part of the revenue for DTT Subsidize program
- ✓ The DTT Subsidize program will be by Cash Coupon to every household in Thailand
- ✓ Coupon value should be enough for DTT STB + Active indoor or outdoor antenna
- ✓ The programs should start very early

Conclusion

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- DTT will be very important Free-To-Air TV Platform in the future better QoS and better specific contents
- DTT is public utility including Community/Public/Commercial Service
- Up to 7 HD for Commercial Service and 4 HD for Public Service (total of 11 HDTV for Thailand)



Thank You