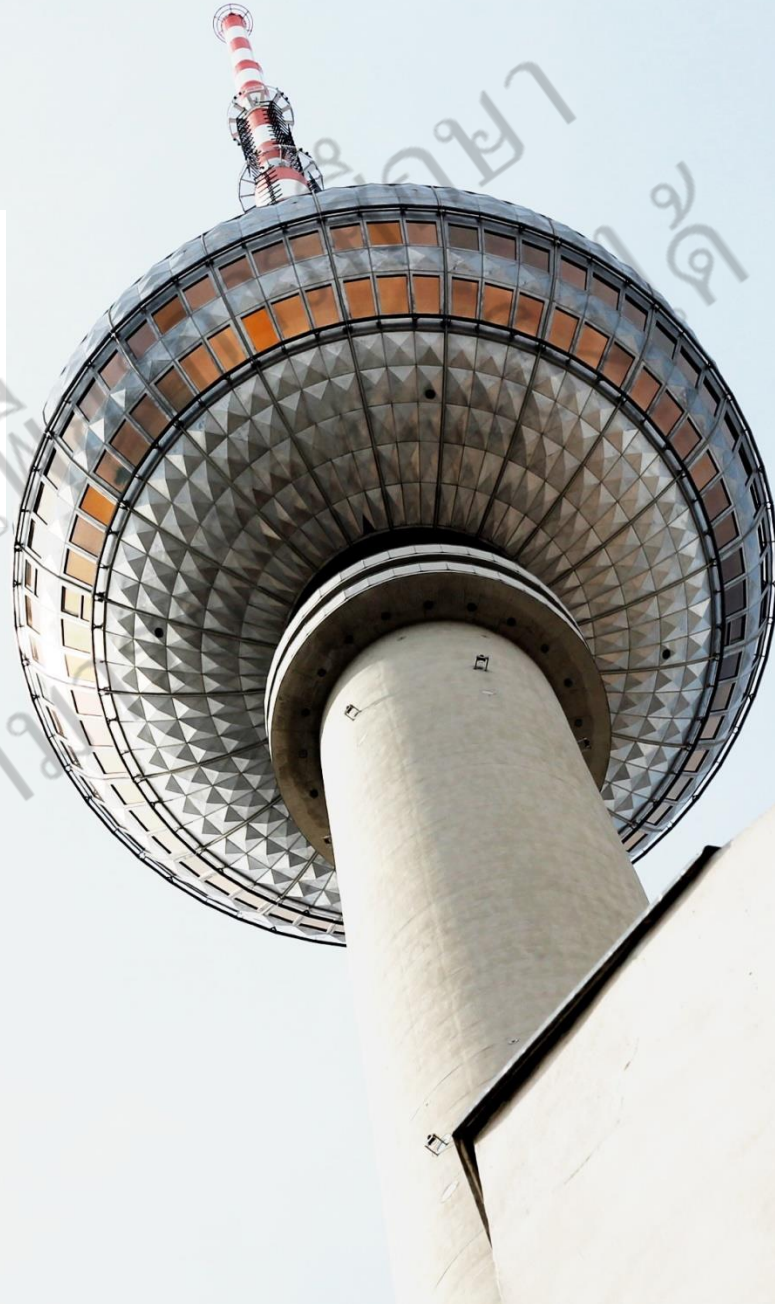


# Market Competition Research: Ex-ante Broadcasting Markets

TIME Consulting, 30 May 2016



# Content

- 1** Scope and Methodology
- 2** Pay TV Retail Market
- 3** Wholesale DTT Market
- 4** Wholesale Cable Market
- 5** Wholesale Satellite Market
- 6** Conclusions and Recommendations

This project focuses on giving clear definitions of ex-ante market as well as identify current market players and tendency of abusing market power.

## Project Objectives

หน้า ๕  
เล่ม ๑๓๑ ตอนพิเศษ ๑๕๔ ง ราชกิจจานุเบกษา ๑๕ สิงหาคม ๒๕๕๗

### ประกาศคณะกรรมการกิจการกระจายเสียง กิจการโทรทัศน์ และกิจการโทรคมนาคมแห่งชาติ

เรื่อง หลักเกณฑ์การพิจารณากำหนดผู้มีอำนาจเหนือตลาดอย่างมีนัยสำคัญในตลาดที่เกี่ยวข้อง  
ในกิจการกระจายเสียงและกิจการโทรทัศน์ และมาตรการเฉพาะเพื่อป้องกันมิให้มีการกระทำอันเป็น  
การผูกขาดหรือก่อให้เกิดความไม่เป็นธรรมในการแข่งขัน

พ.ศ. ๒๕๕๗

โดยที่เป็นการสมควรกำหนดมาตรการเพื่อป้องกันมิให้มีการกระทำอันเป็นการผูกขาดหรือ  
ก่อให้เกิดความไม่เป็นธรรมในการแข่งขันในกิจการกระจายเสียงและกิจการโทรทัศน์ คณะกรรมการ  
กิจการกระจายเสียง กิจการโทรทัศน์ และกิจการโทรคมนาคมแห่งชาติ จึงเห็นควรกำหนดนิยามของ  
ตลาดและขอบเขตของตลาดที่เกี่ยวข้องในกิจการกระจายเสียงและกิจการโทรทัศน์ เพื่อใช้ในการประเมิน  
สภาพการแข่งขันและกำหนดมาตรการเฉพาะสำหรับตลาดที่เกี่ยวข้องได้ซึ่งประเมินแล้วพบว่าการแข่งขัน  
อย่างไม่มีประสิทธิภาพ พร้อมทั้งวางแนวทางในการกำหนดมาตรการกำกับดูแลล่วงหน้าที่จะป้องกัน  
ผู้มีอำนาจเหนือตลาดอย่างมีนัยสำคัญมิให้ใช้อำนาจในการจำกัดหรือกีดกันการแข่งขันในกิจการกระจายเสียง  
และกิจการโทรทัศน์

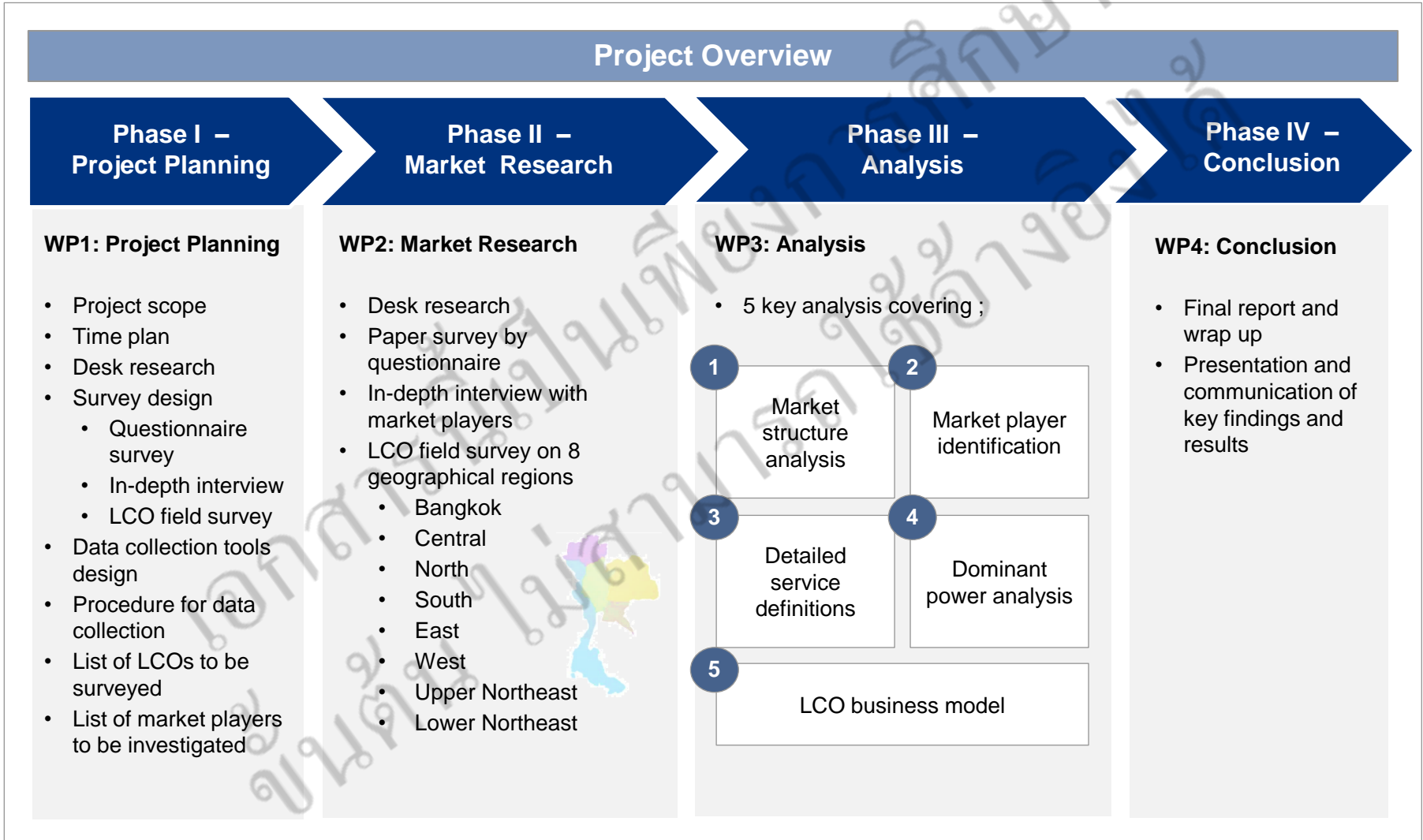
อาศัยอำนาจตามความในมาตรา ๒๗ (๖) (๑๑) และ (๒๔) แห่งพระราชบัญญัติองค์กรจัดสรร  
คลื่นความถี่และกำกับการประกอบกิจการวิทยุกระจายเสียง วิทยุโทรทัศน์ และกิจการโทรคมนาคม

### Key Objectives



“NBTC Notification on Ex-ante Broadcasting Market Regulation”

To achieve the project's objectives, four work plans (WPs) are put in place with the detail as followed:



# Key analysis lie on market structure, market players, detailed service definition and dominant power analysis as well as current LCO business model

## Key Analysis

### Key Issues:



To collect data from LCO, the survey of 30 companies nationwide covering all regions in Thailand is conducted.

## LCO Field Survey

3 companies

7 companies

2 companies

6 companies

5 companies

3 companies

4 companies

**LCOs to be surveyed : 30 companies**

Region	No. of LCOs	Proportion (%)
Bangkok	5	17%
Central*	7	23%
West	2	7%
East	3	10%
North East*	6	20%
South*	4	13%
North	3	10%
<b>Total</b>	<b>30</b>	<b>100%</b>

### **Criteria for selecting the LCOs:**

1. LCO revenue > 1 million THB per year
2. Reflect % distribution of licensed LCOs
3. Reflect % distribution of LCO size (by revenue) in a region
4. The biggest LCO of each regions must be included.

\*including Upper & Lower Central/ North East/ South



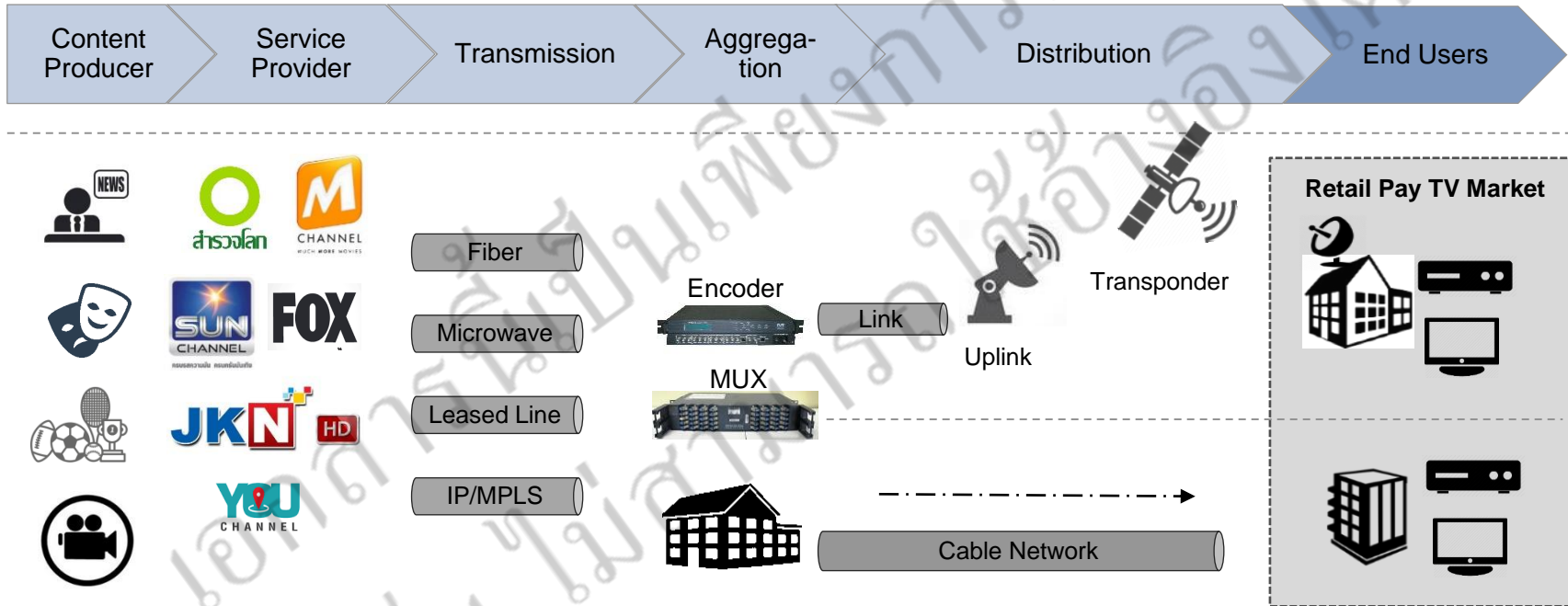
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The retail Pay TV market is where there is relationship to “end users” for receiving Pay TV services. The service provision can be in from of satellite and cable.

## Retail Pay TV Market vs. Value Chain vs. NBTC License Classification

### Broadcasting Value Chain



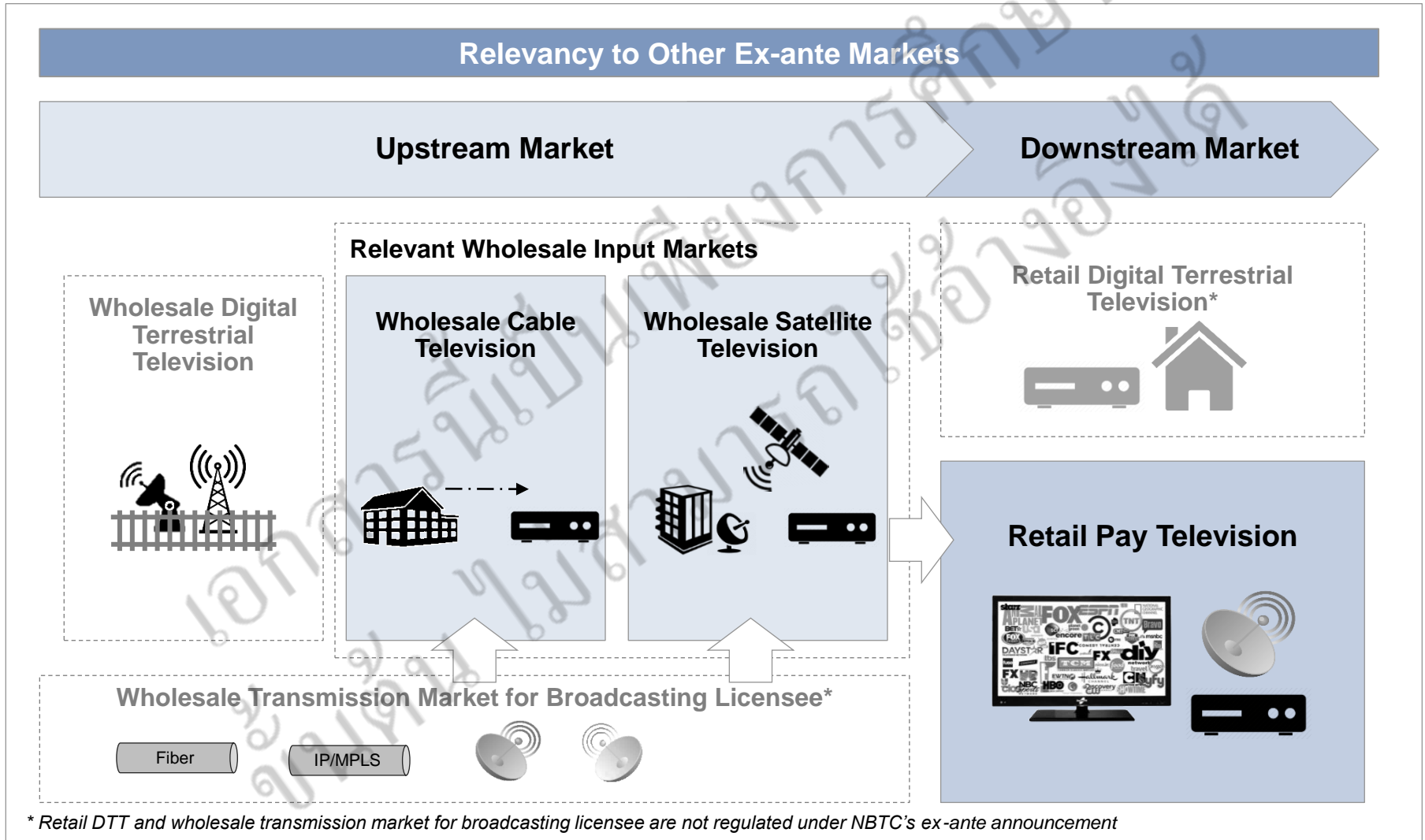
**Need Broadcasting License from the NBTC?:** In the wholesale part, the license criterion is based on who is the customer. If the customer is a broadcasting licensee, then a broadcasting license is required for the provider.



\*TIME Consulting Analysis based on interview with ONBTC



In the downstream market, the retail Pay TV market is related to upstream wholesale cable and wholesale satellite.



There are 2 categories of services in the retail pay TV market. These services includes 3 types of main services and one related service.

## Pay TV Service Categories

### Main Service

### Related Service

**R1** = Subscription fee

**R2** = No subscription fee

**R3** = Pay per view

#### Service Fee

Periodic recurring fee e.g. monthly or annually payment

One time payment for receiving equipment without on-going fee

One-off fee  
-Per Time Period  
-Per Event

#### Installation Fee

With/without installation fee

With/without installation fee

With/without installation fee

#### Service

Termination of service when not paid

Free View

Termination of service when not paid

#### Example



**R4**

After sales support and maintenance services

**Business Model of Thai Pay TV operators can be categorized into 2 main types; subscription-based and set-top-box-based.**

**Thai Pay TV Market Landscape**

**Set-Top-Box based Business Model**

**Satellite Operators (Examples)**



- Satellite Operators
- 14 m STB



- Satellite Operators
- 3.5 m STB



- Satellite Operators
- 2.4 m STB



- Satellite Operators
- 2 m STB



- Satellite Operators
- 1.7 m STB



- Satellite Operators
- 0.3 m STB

13 Network Licensees / 14 Brands

**Subscription-based Business Model**

**Cable/Satellite Operators (Examples)**



- Satellite/cable operator
- 1.4m subscribers (monthly subscription only)



- Cable operator
- 0.7 m subscribers



- Local cable operator: LCOs
- 3.0 m subscribers

2 NW Licensees

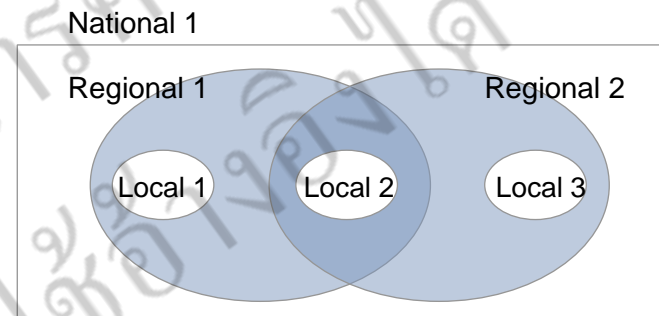
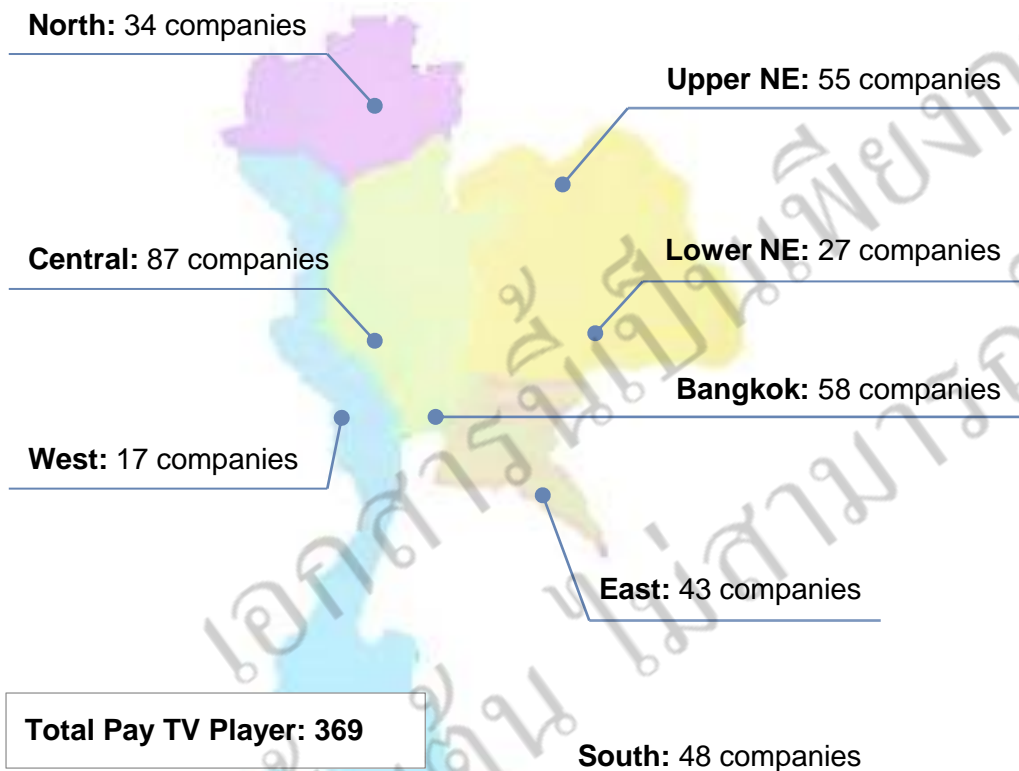
354 NW Licensees\*

Source: ONBTC Database, DBD, Phone Interview, Field Survey and TIME Consulting Analysis

\*Remarks: 25 licensees are no longer in operation but not yet revoke the license, 3 licensees sold their business, 4 licensees are about to close in 2016

Pay TV market player distribution has an influence on level of competition in each area. Regional/local LCOs affected most resulting in the decreased number of players.

## Pay TV Market Player Distribution and Competition



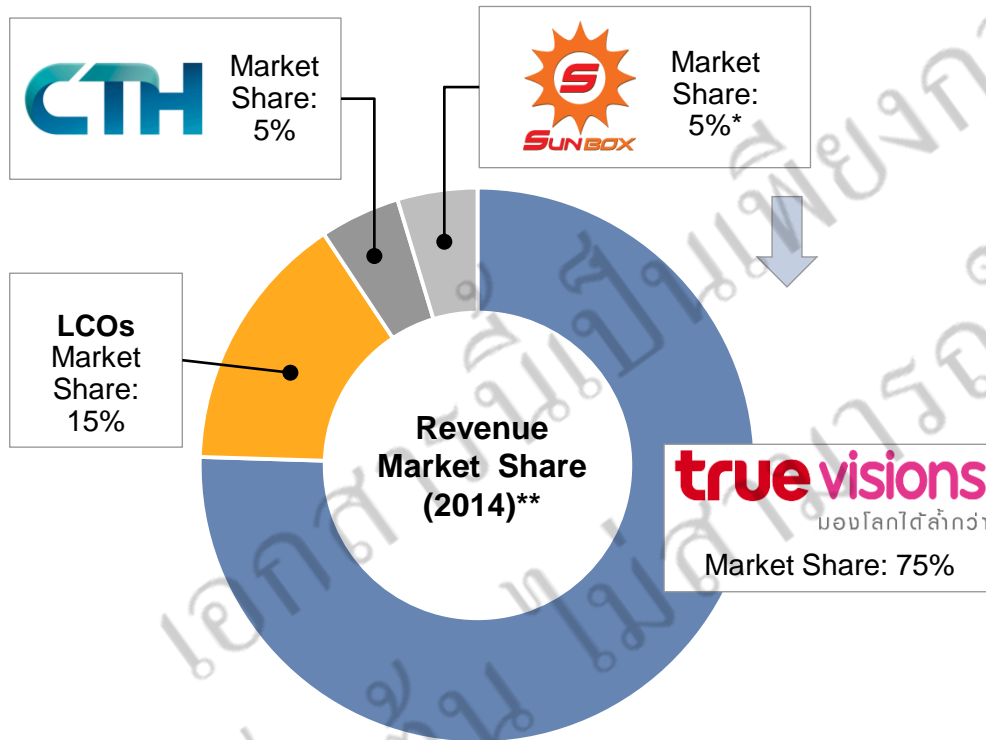
- Market distribution of regional and local licensees affects their market competition
- **Competition arise if and only if licensees share their service areas**
- Local and regional licensees have to compete among themselves as well as national licensees who benefit from economy of scale
- As a result, **the numbers of regional and local LCOs licensees decline;**

LCOs	May 2016	Aug 2015*	Change
National	4	3	+1
Regional	44	60	-16
Local	306	318	-12
<b>Total</b>	<b>354</b>	<b>381</b>	<b>-27</b>

Source: NBTC Database, DBD, Phone Interview, Field Survey, NBTC Broadcasting Market Competition Report 2015 and TIME Consulting Analysis

Thai retail pay TV market size in 2014 is 6,647 million baht. True Visions and CTH are the dominant satellite pay TV players, while Chareon dominates the LCO market.

## Pay TV Market Share: Who are Big Players?



- In terms of 2014 revenue, **satellite pay TV players dominate overall retail pay TV market (85% of the overall market)**
- Satellite pay TV market includes 14 licensees, however, **only three of them report revenue from its subscription or STB sales & services to the NBTC (2014)**
- **Chareon group is a largest group among LCO players.** The group takes up over 15% of the LCOs' share (2% of overall retail pay TV market.)

**“Therefore the biggest 3 players in the market are True Visions Group, CTH and Chareon Group”**

Note: \*Sunbox (Starz (Thailand) Co., Ltd) is the only “no subscription fee” satellite pay TV operator who reports its STB sales & services to the NBTC

Note: \*\*As reported to the NBTC i.e. covering NBTC licensees only  
Source: NBTC

# True Visions Group is the largest Pay TV player. There are some key issues indicating that it has market dominance position and tendency of abusing market power.

## 1. Market Dominance & Tendency of Abusing Market Power: True Visions Group

### Business KPIs



- The largest Pay TV player
- Subsidiary of True Corp providing
  - fixed internet
  - mobile broadband
- Offering Bundled Packages
- Focus on Subscription Service in Cable and Sat

### Ex-ante Market Dominance Analysis

#### (a) Market Share Development

- Although most of Pay TV players are struggling in the business, True Visions Group's revenue **can maintain its growth.**

#### (b) Vertical Integration

- True Visions Group and its partners (e.g. parent companies) own/operate the most premium contents, channels and distribution networks

#### (c) Potential Competition

- Growth strategy is to enlarge its retail base to mass market with lower ARPU. **Lower price and convergence strategy** have been successfully implemented.
- **High variety of content and premium content** in particular e.g. sport, series, movies, Thai Premier League etc.

### Abusing Market Power?

**(a) Some retail bundled packages** may lead to margin/price squeeze -> may require margin squeeze test

**(b) Wholesale bundled offers** e.g. set of channels to LCO, not for a la carte channel may lead to margin/price squeeze -> may require margin squeeze test

**(c) Low price package** e.g. Happy Family 299 for mass market is lower than the LCO package price. This might be too low and thus causes competition issue.

*With (a), (b) and (c) together, True Visions Group may have tendency to exercise price/margin squeeze.*

Having Market Dominance

Tendency of Abusing

Source: Annual Report 2015, Interview and Public Information



**CTH, as currently reported to the NBTC, has no market dominance. Revenue and subscriber size and future development should be further investigated.**

**2.**

**Market Dominance & Tendency of Abusing Market Power: CTH**

**Business KPIs**



- The second largest Pay TV player
- Subscription Pay TV and Pay per View

**Ex-ante Market Dominance Analysis**

**(a) Market Share**

- Only 5% market share in terms of revenue (as declared to the NBTC)
- Although the total revenue potential will be much higher than the current reported figure and we expect CTH to have about 20-25% revenue market share, there is no proof of evidence so far.

**(b) Potential Competition**

- CTH have the famous football content such as premier league 2013 – 2016 to arrange in “Stadium Channel but it now end of right.
- CTH, however, can use alternative strategy as revenue sharing or pay per view with other player but not direct competitor in Pay TV such as GMMZ-Z Pay TV, LCO to generate income from the famous football content but this strategy is canceled.



- DTV is an alternative business model to make profit from premium content beyond Pay TV market



**No Market Dominance**



**Remarks:**

- Revenue and subscriber size and future development should be further investigated

Source: CTH Website, NBTC, TIME Analysis, \* Isranews

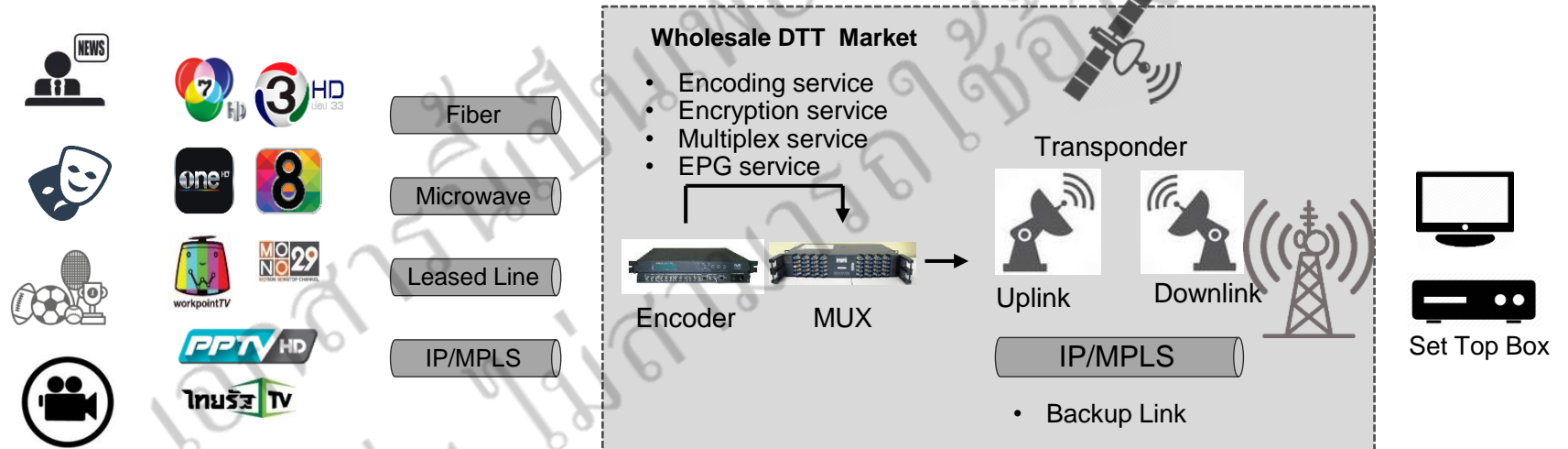
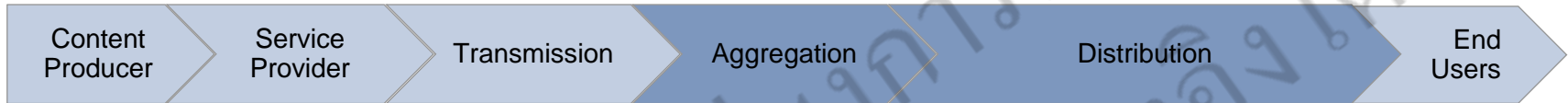
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The WS DTT covers aggregation & distribution activities. For licensing, if the customer is a broadcasting licensee, a broadcasting license is needed for the provider.

## Wholesale DTT Market vs. Value Chain vs. NBTC License Classification

### Broadcasting Value Chain



**NBTC License Classification\*:** License criterion is based on who is the customer. If the customer is a broadcasting licensee, then a broadcasting license is required for the provider.



\*TIME Consulting Analysis based on interview with ONBTC

In the upstream market, the main market is divided by platform i.e. terrestrial, cable and satellite while those markets are supported by wholesale transmission services.

Relevancy to Other Ex-ante Markets

Upstream Market

Downstream Market

Divided by Platform

Wholesale Digital Terrestrial Television

Wholesale Satellite Television

Wholesale Cable Television

Retail Digital Terrestrial Television\*



Retail Pay Television



Wholesale Transmission Market for Broadcasting Licensee\*

Fiber

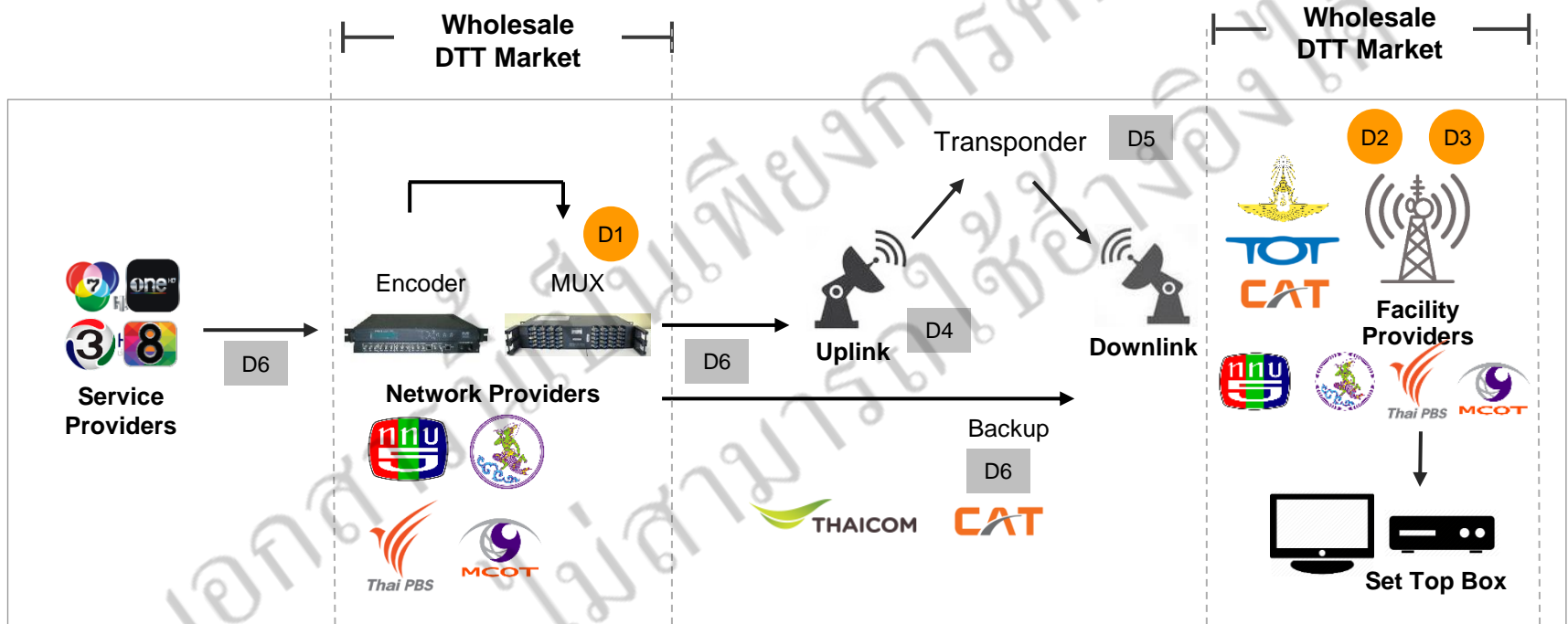
IP/MPLS



\* Retail DTT and wholesale transmission market for broadcasting licensee are not regulated under NBTC's ex-ante announcement

The main services in this market covers Mux service (end to end) and facility service. Telecom services e.g. uplink and satellite transponder is also part of the value chain.

## Wholesale DTT Market Structure



### Main Services

D1 = Mux service

### Facilities Services

D2 = Facility Site Rental

D3 = Co-location Site Rental

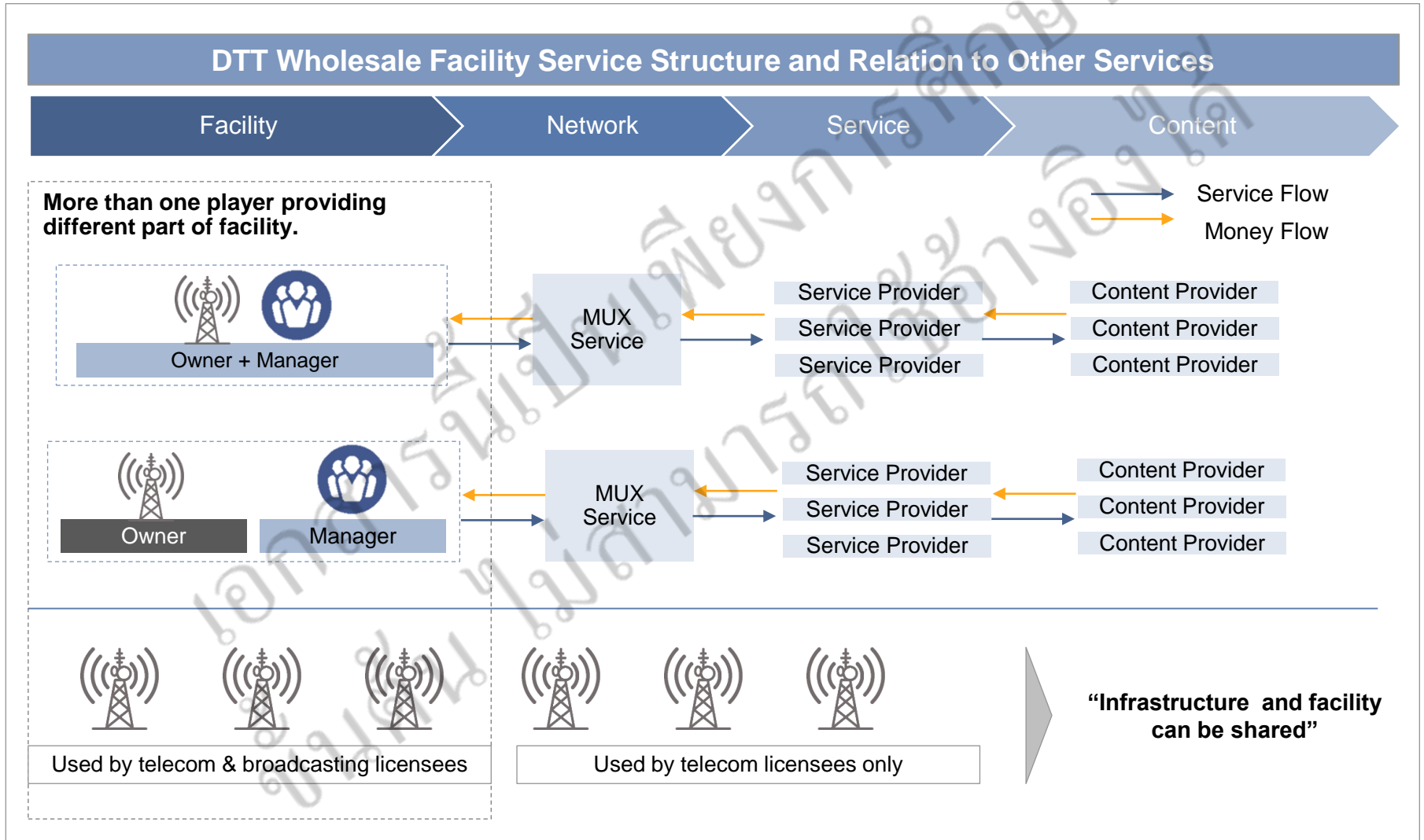
### Related Services

D4 = Uplink Service

D5 = Transponder

D6 = Transmission service (i.e. IP/MPLS)

The collocation service is part of the facility site rental service as there could be more than one player providing different part of facility.





**MUX costs occur in MUX center and in DTT sites where several cost elements can be broken down. Some are provided by Facility Provider but some are from NW Provider.**

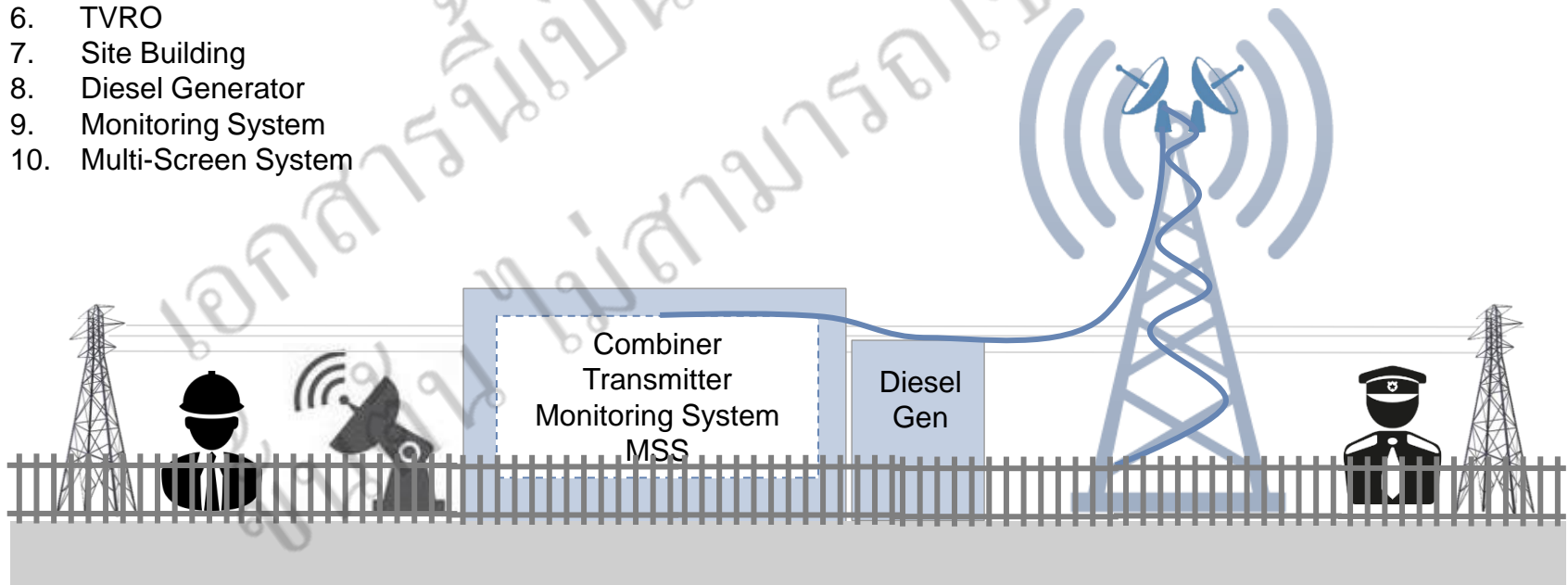
## Components in a Site

### Capital Expenditure

1. Tower
2. Road
3. Antenna System
4. Combiner
5. Transmitter System
6. TVRO
7. Site Building
8. Diesel Generator
9. Monitoring System
10. Multi-Screen System

### Operational Expenditure

1. Land & Site Rental
2. Electricity
3. Operation & Maintenance
4. Security



There are only 7 players in the wholesale DTT market right now. 4 players provide both network and facility services to the other licensees.

## DTT Wholesale Market Players



### Network Providers (MUX and Transmission Services)

- Royal Thai Army Radio and Television
- The Government Public Relations Department
- Thai Public Broadcasting Service
- MCOT Public Company Ltd.

### Facility Providers (Facility Service)

- Royal Thai Army Radio and Television
- The Government Public Relations Department
- Thai Public Broadcasting Service
- MCOT Public Company Ltd.



### Facility Providers (Co-location Service)

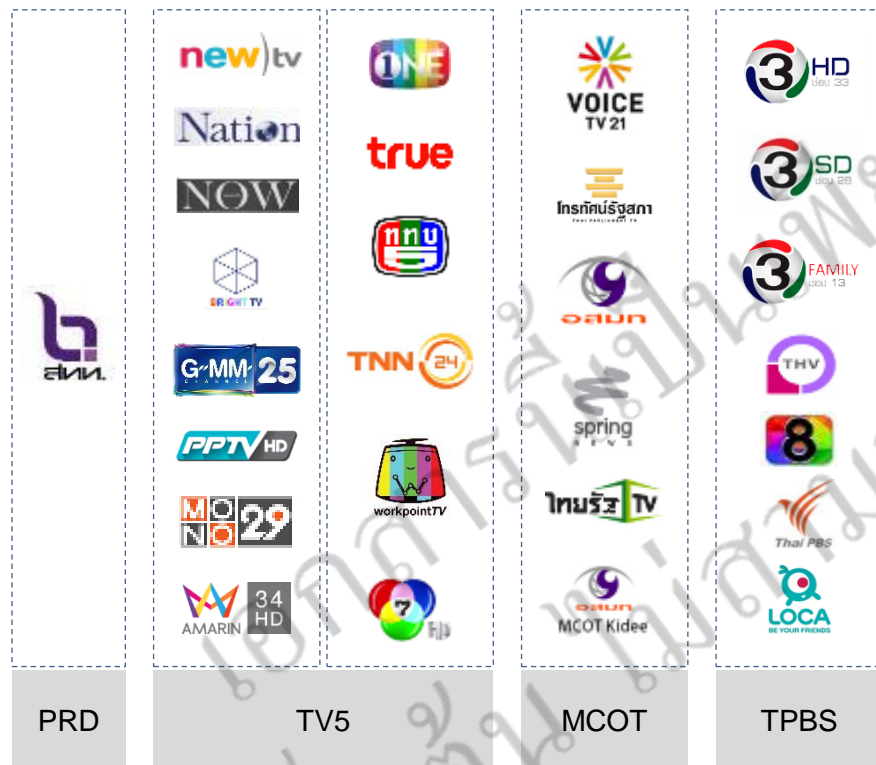
- TOT Public Company Ltd.
- CAT Telecom Public Company Ltd.
- Royal Thai Air Force

Facility Sites of 171\*  
7 Players in Total

\*According to NBTC's DTT Plan B.E.2015 (version 3)

All 7 providers; TPBS, MCOT, TV5, PRD, TOT, CAT, and Air Force are considered as big players in the wholesale DTT market.

## Market Player Analysis



PRD

TV5

MCOT

TPBS



Facility Providers  
TOT, CAT, Air force



Service Providers  
MUX Providers

\*calculated from monthly service charge

Operators	Expected Full Revenue (mTHB)*	%Market Share
	1,359.36	52.39%
	167.4	6.45%
	496.8	19.15%
	571.2	22.01%

- To identify key big players in the market, market share is normally used as the main selection criteria.
- However, in wholesale DTT market it is not applicable as **network deployment, operation and pricing are regulated by the NBTC**
- As a result, **all locations of facility sites that have been already concluded are natural monopoly at each location.** Therefore the network/facility licensees who own the sites at those locations are considered the sole/oligopoly players in each geographical market.

“All 7 providers; TPBS, MCOT, TV5, PRD, TOT, CAT and Air force are considered sole players in each geographical market ”

Due to high barrier to entry and the maturity of market, all players have dominance power over the market. There is tendency of abusing market power from pricing.

## Market Dominance & Tendency of Abusing Market Power

### Provider



- Mostly **government-sponsored**
- Only **licensees** are able to **provide the services**
- Considered as **'Collective Dominance'**
- **Network Providers** ; TV5, PRD, TPBS, and MCOT
- **Facility Providers** ; TV5, PRD, TPBS, MCOT, TOT, CAT, and Air Force

### Ex-ante Market Dominance Analysis

#### (a) High Barrier to Entry

- Authority on providing network and facility services is regulated by NBTC. Only licensed providers are allowed to provide the services.
- According to NBTC's rollout plan, all facility sites are indicated. Therefore, the site owners are naturally considered as sole/oligopoly players in each specific location.
- Network rental agreement between service and network provider is considered as barrier to switch to other network.

#### (b) Market Mature

- **Number of service providers** are restricted by number of licenses issued.

Having Market Dominance

### Abusing Market Power

#### (a) Mux price has not yet reflected the sharing of network infrastructure.

- The regulated price has been set based on different assumption from the current implementation.



#### (b) Facility and co-location services are not regulated by NBTC.

- Facility providers can raise prices / offer high prices on facility and co-location services as they are sole providers in each specific area.

Tendency of Abusing

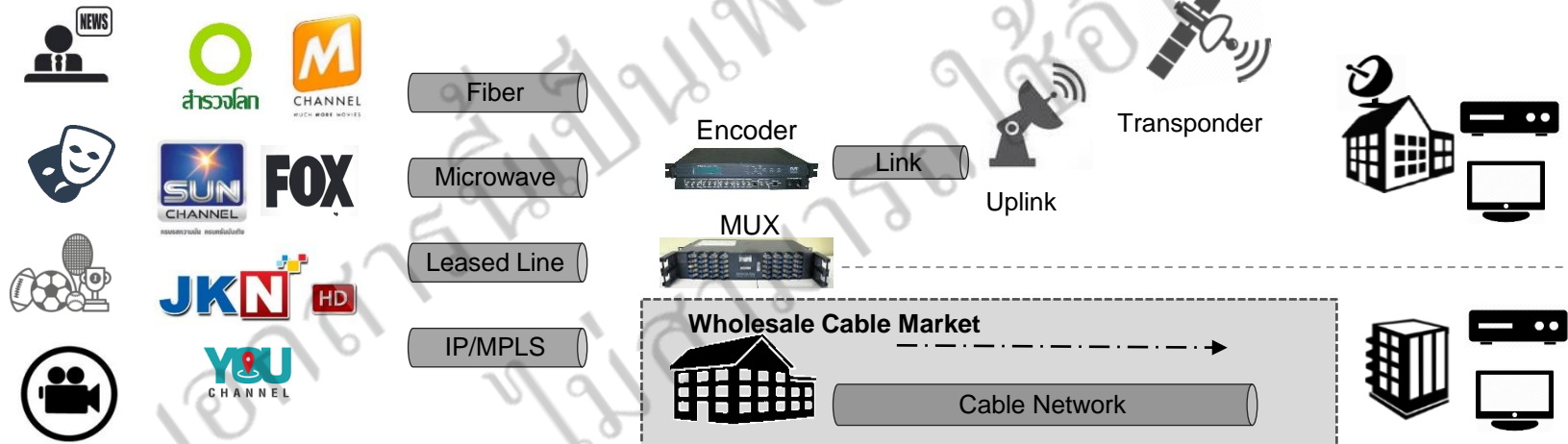
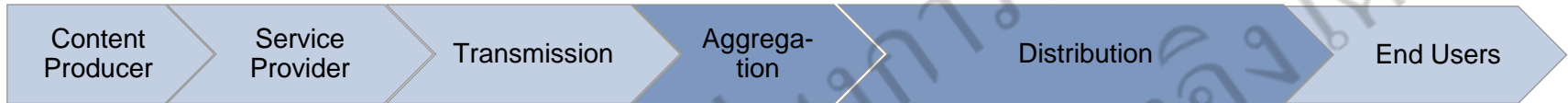
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The wholesale cable market covers aggregation and content distribution activities. Providers in this market require broadcasting licenses from the NBTC

Wholesale Cable Market vs. Value Chain vs. NBTC License Classification

Broadcasting Value Chain



**NBTC License Classification\*:** License criterion is based on who is the customer. If the customer is a broadcasting licensee, then a broadcasting license is required for the provider.

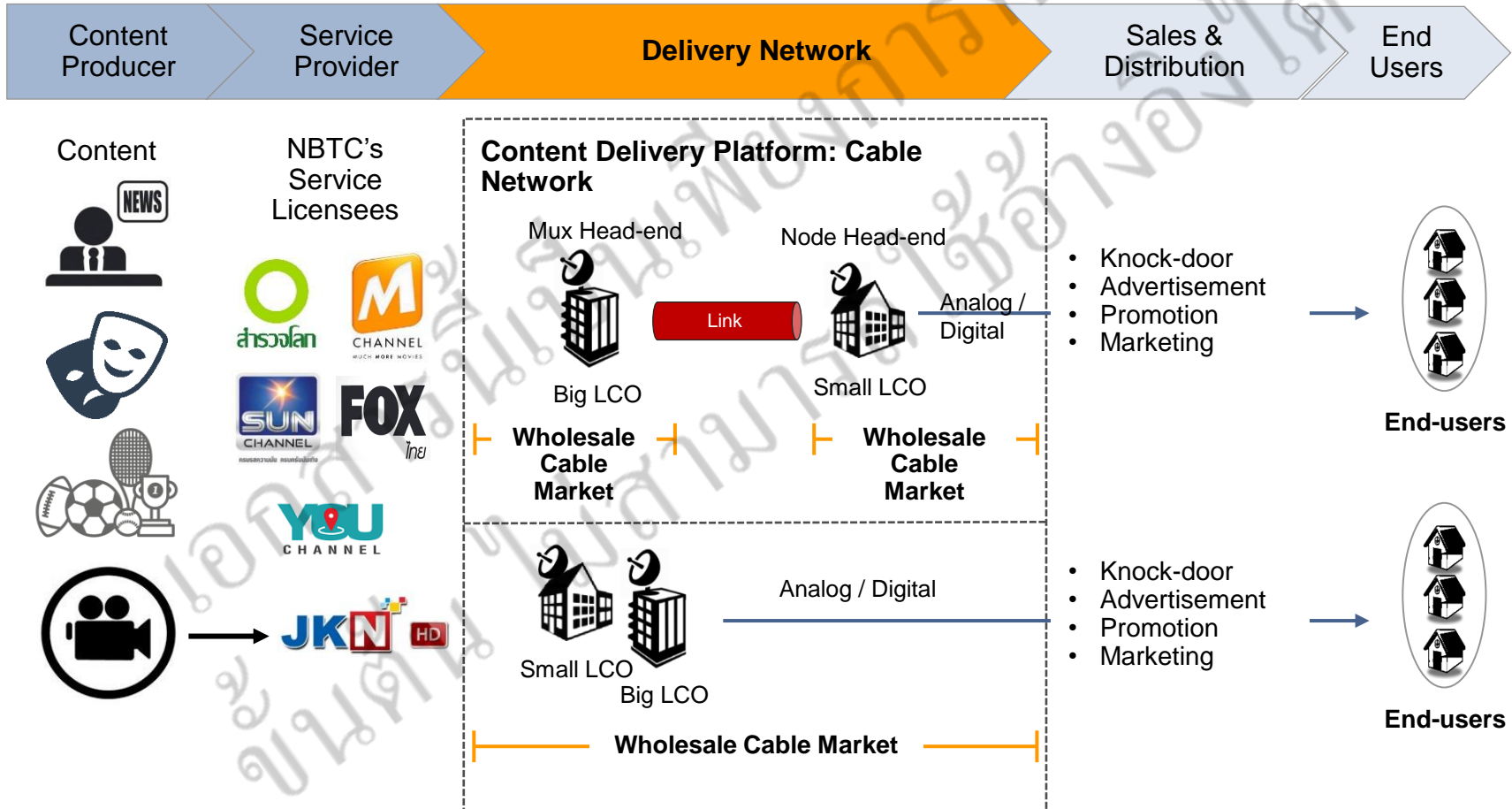


\*TIME Consulting Analysis based on interview with ONBTC



The cable network can be divided into 2 main types; 1.) centralized network and 2.) distributed network.

## Wholesale Cable Market and Broadcast Value Chain



In the upstream market, the main market is divided by platform i.e. terrestrial, cable and satellite while those markets are supported by wholesale transmission services.

### Relevancy to Other Ex-ante Markets

Upstream Market

Downstream Market

Divided by Platform

Wholesale Digital Terrestrial Television



Wholesale Satellite Television



Wholesale Cable Television



Retail Digital Terrestrial Television\*



Retail Pay Television



Wholesale Transmission Market for Broadcasting Licensee\*

Fiber

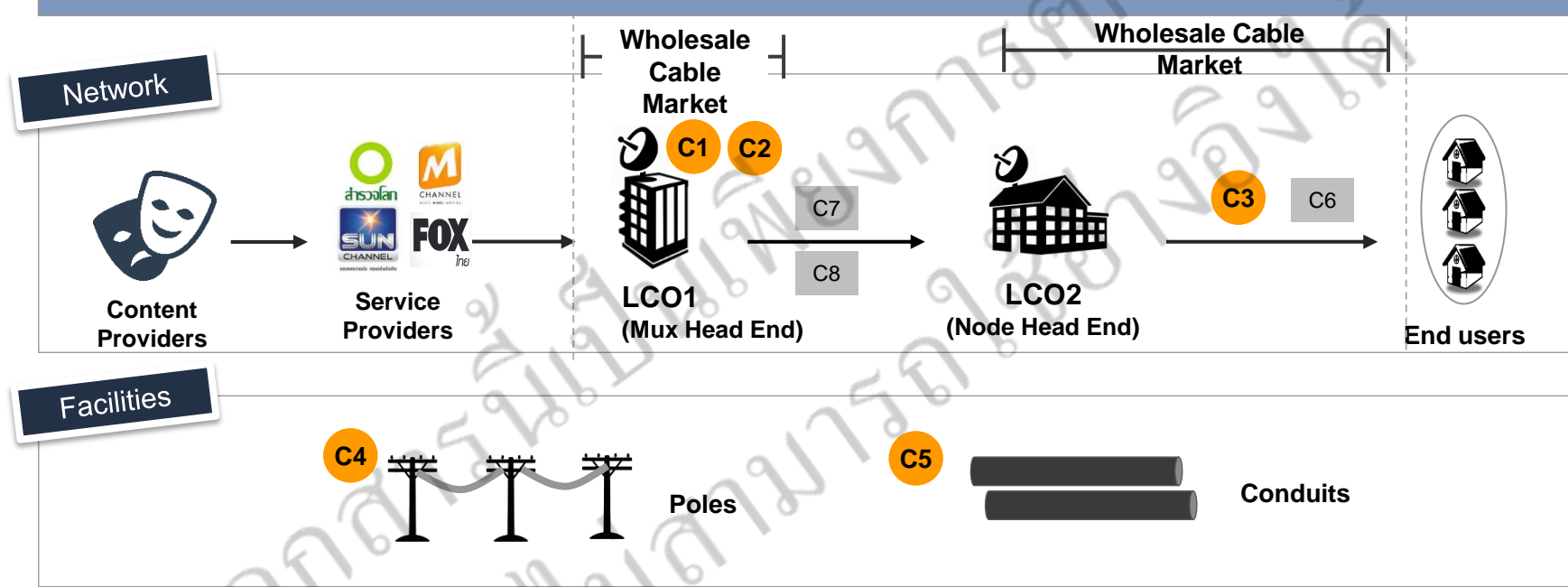
IP/MPLS



\* Retail DTT and wholesale transmission market for broadcasting licensee are not regulated under NBTC's ex-ante announcement

There are 8 relevant services in the wholesale cable value chain. These services can be categorized into 3 groups; main services, facility services and related services.

## Relevant Services in Wholesale Cable Market



### Main Services

- C1** = Mux service
- C2** = Head end sharing
- C3** = Access to last mile for TV transmission

### Facilities Services

- C4** = Pole usage service
- C5** = Conduit usage service

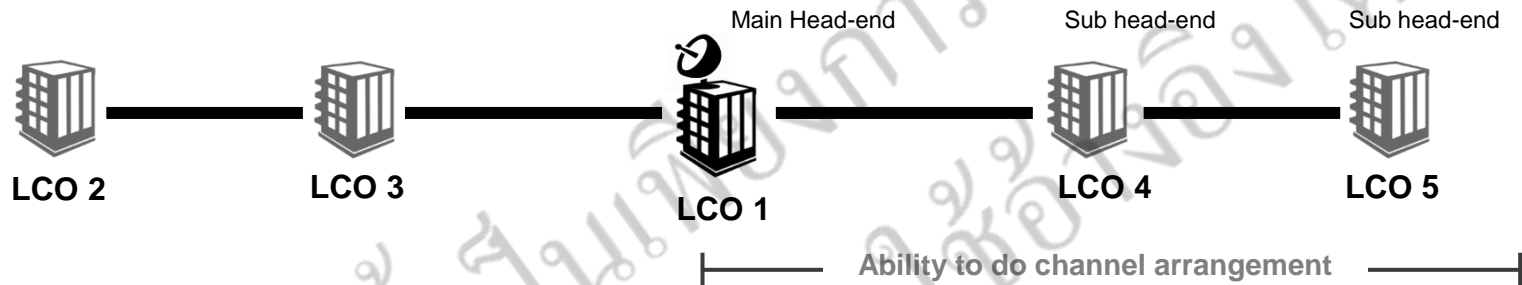
### Related Services

- C6** = Access to last mile for Internet
- C7** = Channel wholesale
- C8** = Transmission service (i.e. IP/MPLS)

Head-end sharing service can be provided to small LCOs. LCOs can also provide internet service to their customers with 2 different models.

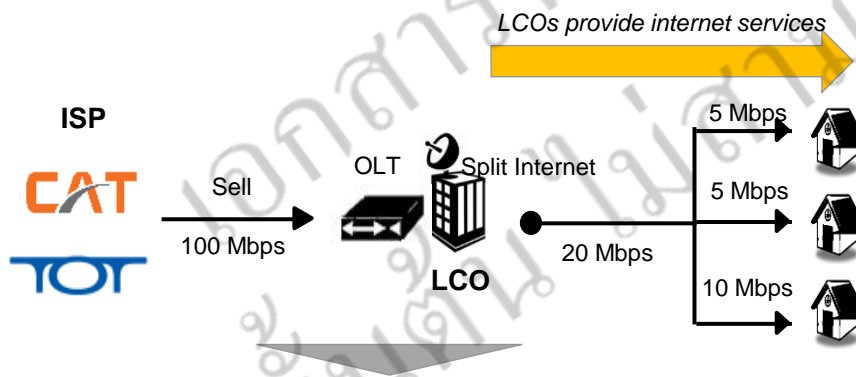
## Head-end Sharing Service Services in Wholesale Cable Market

### Head-end Sharing Service

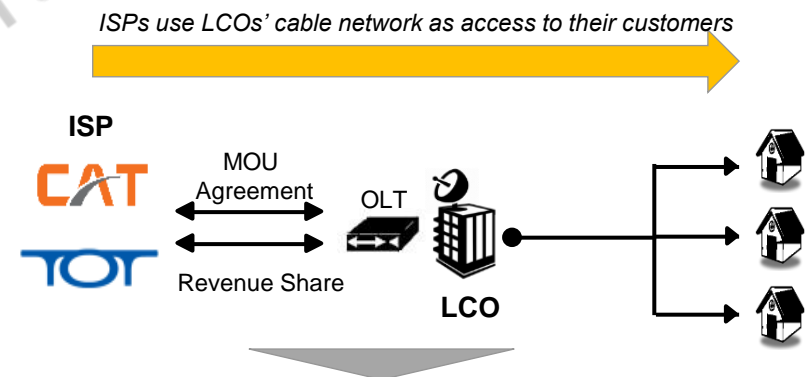


### Internet Service Provider

### Access to Last Mile for Internet Service



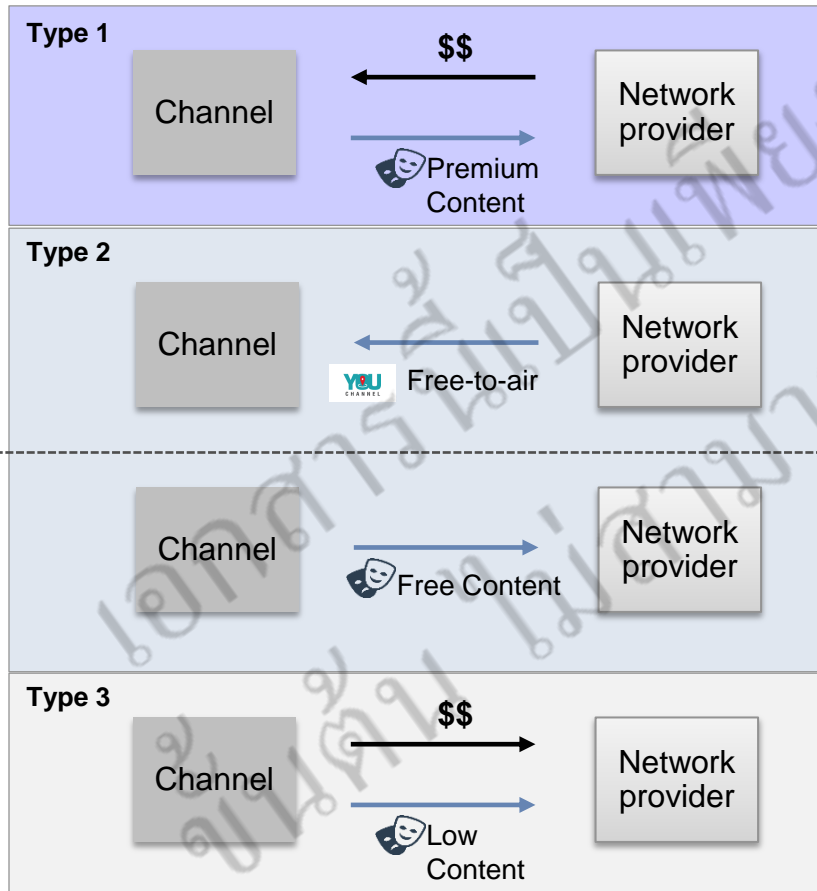
"LCO needs a telecom license however the license type is still unclear (type I or type III)"



"LCO provides access to its last mile which is already covered in its Broadcasting Network License"

Relationship between channels and platform can be explained into 3 types depending on channel value and commercial negotiation and arrangement.

## Relationship between Broadcasters (Channels) and Network Providers



### Purchasing Premium Content FOX HBO

When the contents are premium, it's the network provider that needs to pay to acquire them (Ex: Truevision acquires Fox, HBO, etc.)

### Free-to-air Channels YOU CHANNEL

Free-to-air channels are examples of no-cost content acquisition. (Ex: Ch.7, Ch.3, etc.)

### Free Content Provision

It is when content aggregators deliver contents to the platform for free in order to gain eyeballs. (Ex. Abtv supplies channels to other satellite and cable operators for free.)
















### Mux service for channels Shopping

When the contents are low, it's the content owner itself that needs to pay to the platform to broadcast them; mux service. (Ex: O-shopping, TV Direct)

The wholesale cable market consists of approx. 11 players. Most of them do not charge for the service fee except PEA which is the sole licensee in the facility service.

## Wholesale Cable Market Players

Type	Current Situation	Revenue (2014)**	Remark												
<b>Network Provider: (LCOs)</b>	<p><b>Number of players: 10 players</b></p> 	<table border="1"> <thead> <tr> <th>Service</th> <th>No. of players</th> <th>Revenue declared</th> </tr> </thead> <tbody> <tr> <td>Mux </td> <td>1</td> <td>N/A</td> </tr> <tr> <td>Head-end sharing </td> <td>10</td> <td>N/A</td> </tr> <tr> <td>Access to last mile </td> <td>0*</td> <td>N/A</td> </tr> </tbody> </table>	Service	No. of players	Revenue declared	Mux 	1	N/A	Head-end sharing 	10	N/A	Access to last mile 	0*	N/A	<p><b>Mux service</b> is not common among LCOs as contents are mostly free-to-air and few premium contents</p> <p><b>Head-end sharing</b> revenue is not often reported as it is <b>locally perceived as 'cost-sharing activity'</b>.</p> <p><b>Access to last mile</b> providers are mostly ex-CTH representatives. Yet, current CTH issues hold this market rarely exposed or discussed.</p>
Service	No. of players	Revenue declared													
Mux 	1	N/A													
Head-end sharing 	10	N/A													
Access to last mile 	0*	N/A													

<b>Facilities Provider:</b>	<p><b>Number of players: 1 player</b></p> 	<p><b>Pole Usage Revenue:</b> Declared and paid broadcasting license fee to the NBTC</p>	<p> <b>PEA</b> PEA is the wholesale market's main player.</p> <p> <b>MEA</b> Without an NBTC license, MEA also provides pole facilities in Bangkok area.</p>
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\*Referring to CTH-LCOs partnership which is nowadays technically end of collaboration, \*\* as declared to the NBTC



**PEA is the largest Wholesale Cable player. There are three issues to have market dominant and two behaviors of no tendency abusing market power.**

## Market Dominance & Tendency of Abusing Market Power: PEA

### Business KPIs



#### General Information

- PEA provides the electricity poles over country except Bangkok, Nonthaburi and Samut Prakan.
- There are 300 cable operators using PEA pole network\*

### Ex-ante Market Dominance Analysis

#### Market share

- PEA is the only one who provides electricity pole for cable operators.

#### Countervailing buying power

- Cable operators do not have power to negotiate for price decreases.

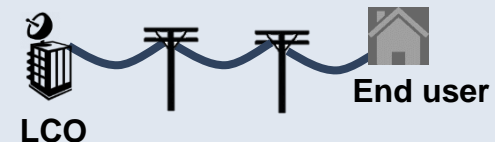
#### Control over infrastructure

- For LCOs to set up cable wire network, pole facilities are necessary.

### Abusing Market Power

#### Regulated Price

- Pole usage fees are regulated under PEA's legal notification regarding electricity pole usage.
- Despite a monopoly position, PEA has never increased pole usage fee\*.



Having Market Dominance

**No** Tendency of Abusing

\*based on interview with PEA

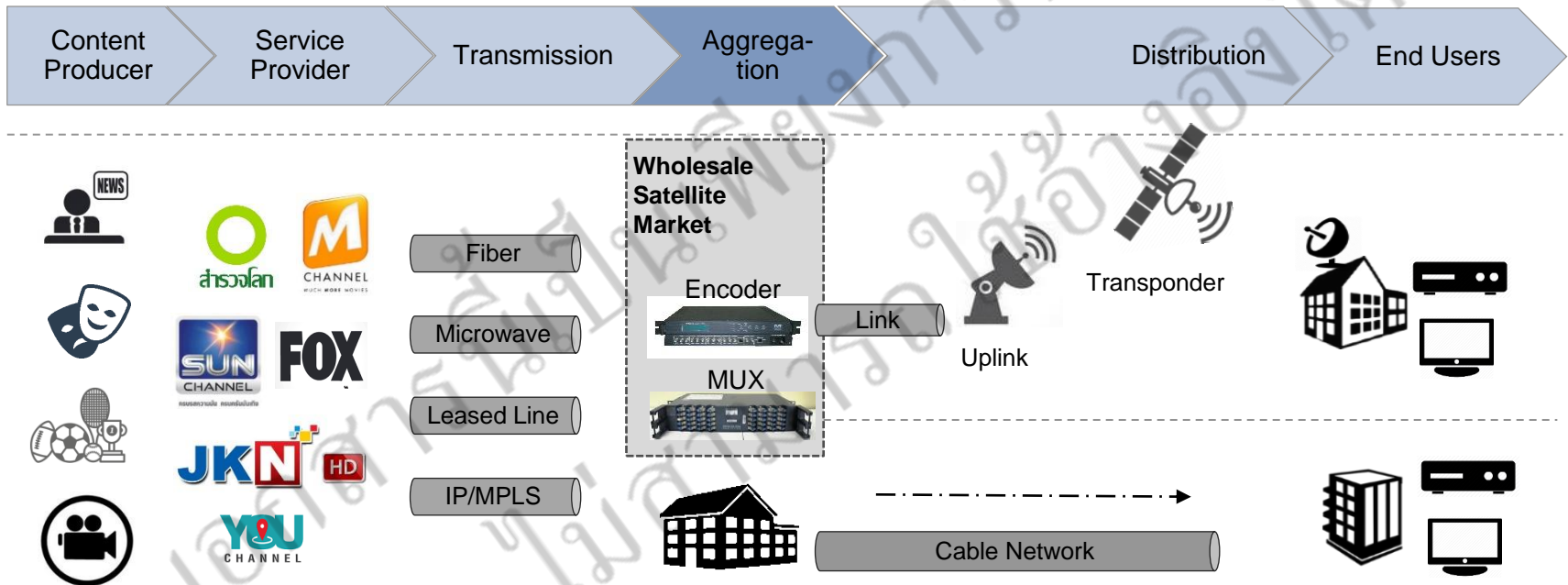
# Content

- 1 Scope and Methodology
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- 5 Wholesale Satellite Market**
- 6 Conclusions and Recommendations

The wholesale satellite market covers aggregation activities. Telecom service is the main part of signal distribution to end users.

## Wholesale Satellite Market vs. Value Chain vs. NBTC License Classification

### Broadcasting Value Chain



**NBTC License Classification\*:** License criterion is based on who is the customer. If the customer is a broadcasting licensee, then a broadcasting license is required for the provider.



\*TIME Consulting Analysis based on interview with ONBTC

In the upstream market, the main market is divided by platform i.e. terrestrial, cable and satellite while those markets are supported by wholesale transmission services.

## Relevancy to Other Ex-ante Markets

Upstream Market

Downstream Market

Divided by Platform

Wholesale Digital Terrestrial Television



Wholesale Satellite Television



Wholesale Cable Television



Retail Digital Terrestrial Television\*



Retail Pay Television



Wholesale Transmission Market for Broadcasting Licensee\*

Fiber

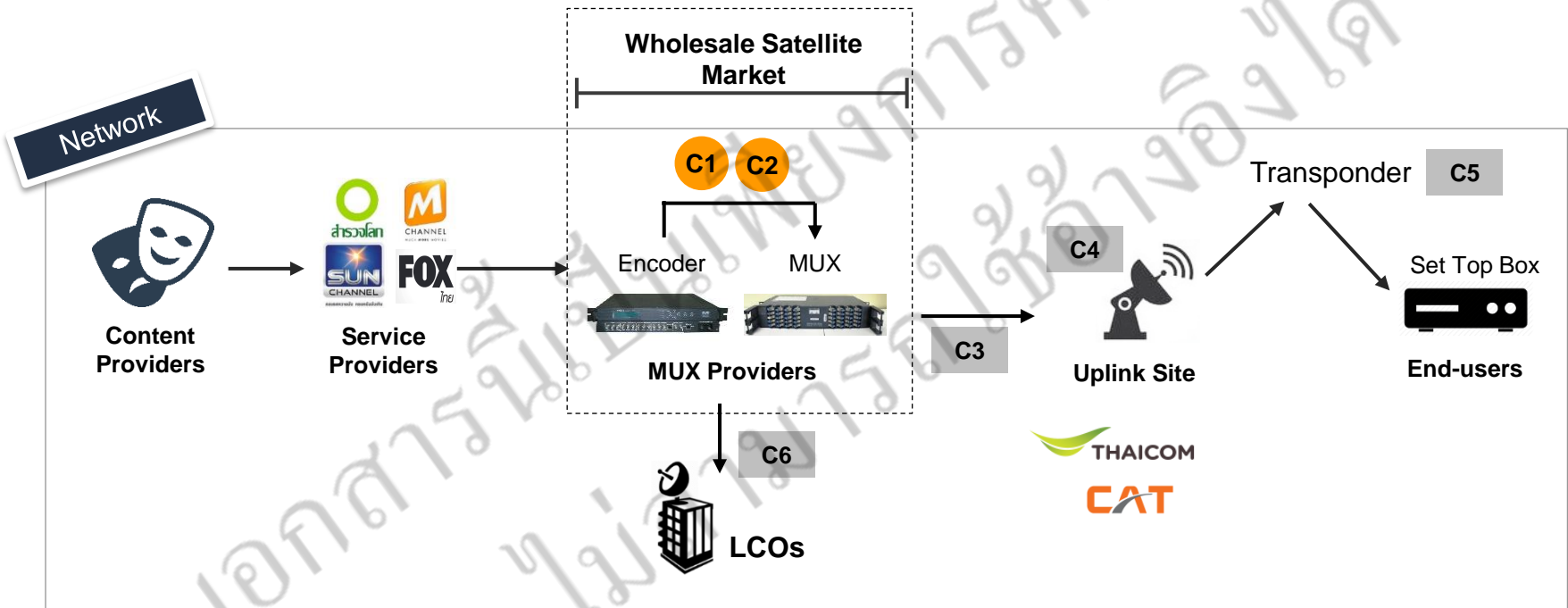
IP/MPLS



\* Retail DTT and wholesale transmission market for broadcasting licensee are not regulated under NBTC's ex-ante announcement

We classify wholesale satellite services into 2 categories; Mux service (end to end) and individual service e.g. OTA, Encryption, EPG etc.

## Wholesale Satellite Market Services



### Main Services

- C1** = Mux service
- C2** = Detailed Mux service (i.e. OTA, Encryption, EPG, etc.)

### Related Services

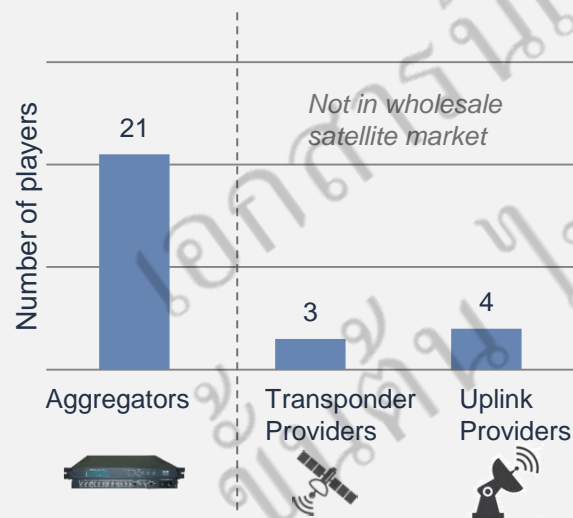
- C3** = Uplink services
- C4** = Transponder services
- C5** = Channel wholesale
- C6** = Transmission service (i.e. IP/MPLS)

There are 21 players in the wholesale satellite market . The service providers which can be classified into 3 types: Aggregators, Uplink Providers, Transponder Providers.

## Wholesale Satellite Market Players

### Wholesale Satellite Market

- Number of Players: **21 players**
- Types of satellite players:
  1. Aggregators
  2. Transponder Providers (not included)
  3. Uplink Providers (not included)



### Aggregators



### Transponder Providers



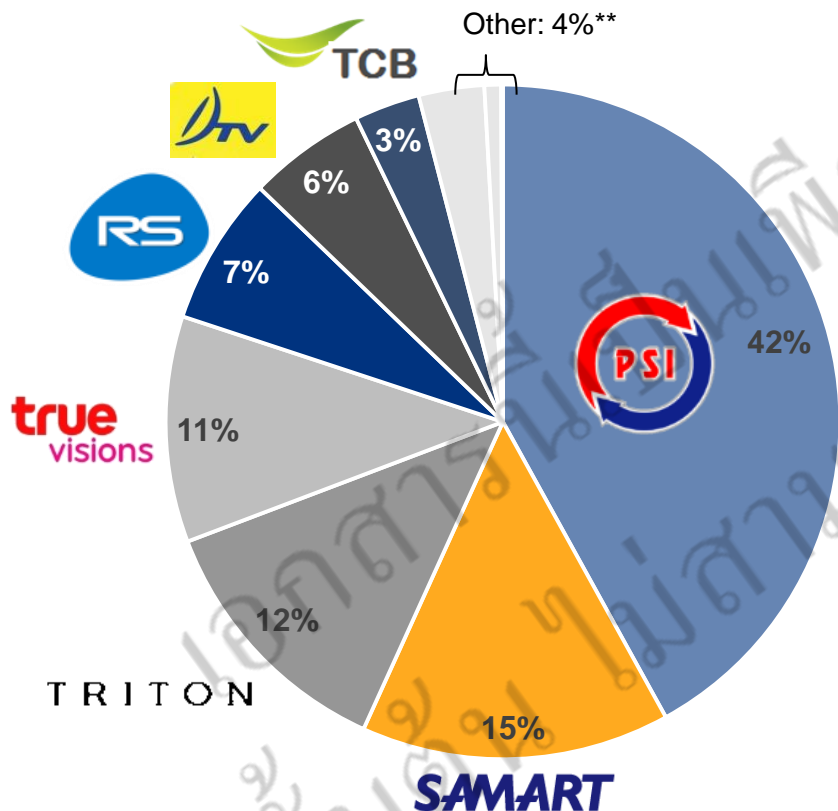
### Uplink Providers





PSI and TCB are key players in the wholesale satellite market. PSI has large market share and TCB's related company, Thaicom, is the owner of Thai satellite.

## Key Players in Wholesale Satellite Market



\*Revenue in 2014 as reported to the NBTC

\*\*Other includes IPM, P5TV and Dynasat

### Top 3 Players

#### PSI:



PSI MUX revenue stands at the highest in the market due to its large subscriber base (number of STBs in the retail market)

#### SAMART & TRITON:

Main players in the satellite wholesale market as they provide MUX services to a number of satellite channels.

### Key Player

#### TCB:

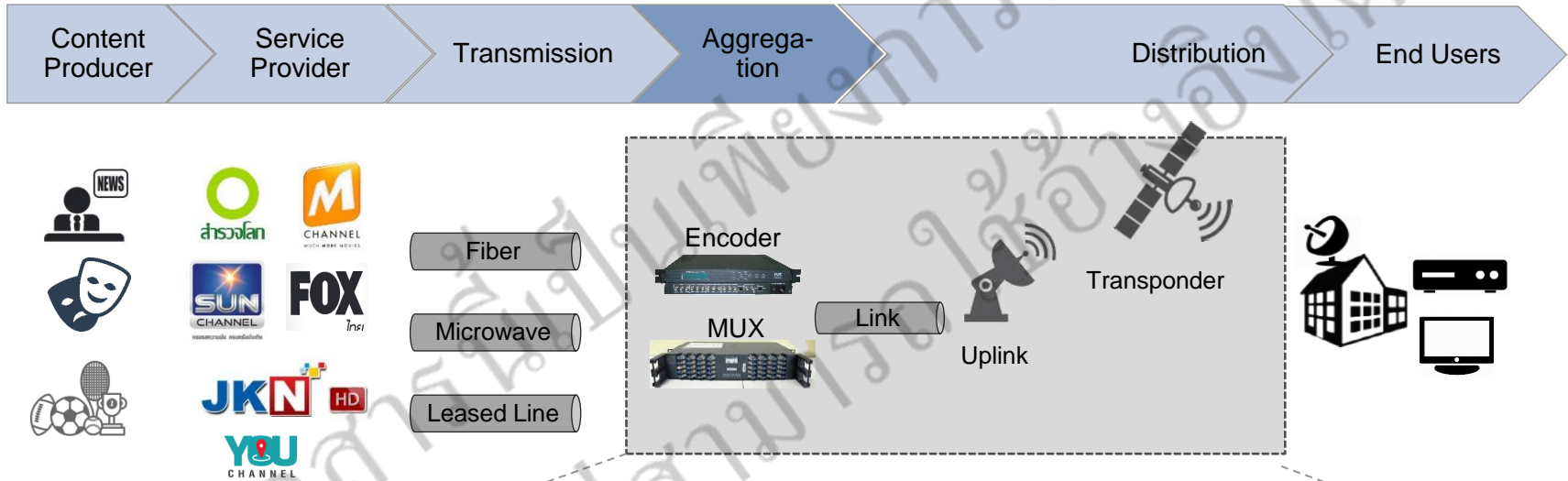


TC Broadcasting is the provider in the primary wholesale market as its related company owns Thaicom satellite.

The market position; primary and secondary market and business set up is the main factor driving different volume of wholesale revenue stream.

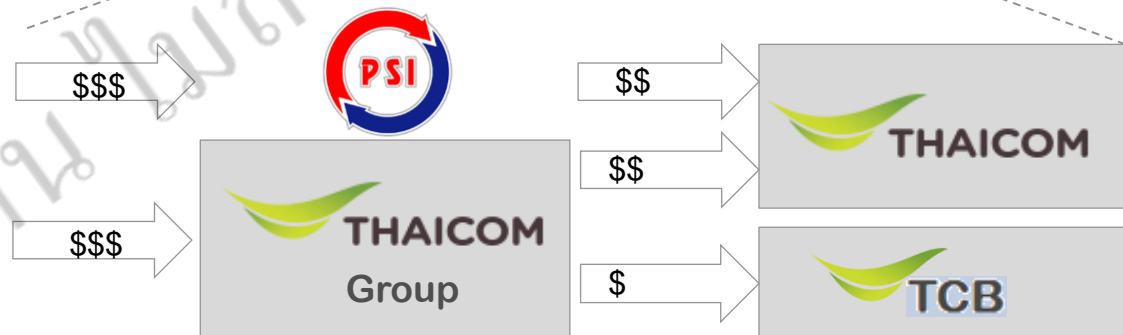
## PSI and TCB Revenue Collection

### Broadcasting Value Chain



### Business Value Chain

- Upstream Secondary Market
- Upstream Primary Market



As TCB is owned by Thaicom, the analysis is more focusing on the group level. It can be concluded that TCB has market dominance but no tendency to abuse.

## 1. Market Dominance & Tendency of Abusing Market Power: Thaicom Group

### Business KPIs



- The 6<sup>th</sup> largest satellite operator globally
- Satellite services
  - Conventional
  - Broadband
- 774 satellite TV channels (126 HD) on Thaicom @78.5E

### Ex-ante Market Dominance Analysis

#### (a) Size of Business



- In 2015, consolidated Thaicom's revenue stands at THB xxx million whereby xx% is satellite-oriented.
- Satellite is a highly profitable unit verified by xx% EBITDA margin in 2015.

#### (b) Control over Infrastructure



- Until 2014, the satellite concession granted to Thaicom by ICT in 1991 has put Thaicom in a significantly dominant position.
- Despite a shift to licensing system in 2014, Thaicom's well-established networks and orbits still keep them a leading satellite operator.

#### (c) Countervailing Buying Power



- Buyers' power against Thaicom is deemed **low** reflected by Thaicom's relatively higher transponder price compared to other satellites.

### Abusing Market Power

**Key Analysis:** Thaicom has relatively high transponder price compared to the other satellites commercially operating in Thailand. However, the price of MUX service alone as reported to the NBTC is relatively low. Therefore there is no factor indicating TCB abusing of its market power.

**Remarks:** Due to perceived high transponder price, further investigate on tendency of abusing market power in telecom market may be needed.

Having Market Dominance

**No** Tendency of Abusing

Source: Annual Report 2015

**PSI has market dominance due to its large market share and distribution network. However, due to satellite market is in downturn, PSI has no abusing of market power.**

## 2. Market Dominance & Tendency of Abusing Market Power: PSI

### Business KPIs



- The largest satellite network provider
- PSI Broadcasting co., Ltd.: a subsidiary of PSI Holding providing
  - Mux services for satellite channels

### Ex-ante Market Dominance Analysis

#### (a) Market Share

- In 2014, PSI's market share for aggregation service stands the highest at 42% among the aggregating licensees\*.
- This PSI's market share has increased from 2013 of 33%.

#### (b) Size of Business

- PSI, as a group, also has a significantly dominant position in the broadcasting industry with the latest consolidated revenue of xx baht in 2014.

#### (c) Distribution and Sales Network

- Huge customer base – 18 million set top boxes sold (2015)
- Extensive network
  - 32 PSI offices nationwide
  - 6,208 PSI dealers nationwide (CTH 477 dealers, SAMART 157 dealers, IPM 75 dealers)
- Therefore, PSI has a high bargaining power against channels.

### Abusing Market Power

#### Key Analysis: Satellite industry is in downturn.

- Despite a relatively bigger size to the competitors, PSI revenue dropped last year by 40% due to government support of DTT.
- Mux price dropped from 7 digits THB per channel per month to 6 digit THB.
- Thus, PSI is not in the position that power abusing is deemed possible.

Having Market Dominance

**No** Tendency of Abusing

Note: \*Only licensees who declared network revenue for NBTC's license fee division are taken into account for market share calculation.

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Ex-ante markets are interrelated to wholesale transmission market for broadcasting licensee and also telecom market e.g. satellite communication.

### Relevancy to Other Ex-ante Markets

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Wholesale Satellite Television

Wholesale Cable Television

Retail Digital Terrestrial Television\*



Retail Pay Television



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Fiber

IP/MPLS








\* Retail DTT and wholesale transmission market for broadcasting licensee are not regulated under NBTC's ex-ante announcement



In summary, dominance players in Pay TV and wholesale DTT markets have tendency of abusing market power. This has to be further investigated by the NBTC.

## Summary

	Retail Pay TV Market	Wholesale DTT Market	Wholesale Cable Market	Wholesale Satellite Market
<b>Number of Players in the Market</b>	368 licensees*	6 licensees + 1 player	10 licensee + 1 player	21 licensees
<b>Related Services/Markets</b>	- Satellite service - Wholesale cable & satellite	- Satellite service - Transmission service	- Satellite service - Transmission service	- Satellite service - Transmission service
<b>Big Players</b>	- True Visions Group - CTH - Chareon Group	- TPBS, MCOT, TV5, NBT, TOT, CAT, Airforce	- PEA	- TCB - PSI
<b>Market Dominance</b>	- True Visions Groups	- TPBS, MCOT, TV5, NBT, TOT, CAT, Airforce	- PEA	- TCB - PSI
<b>Tendency of Abusing Market Power</b>				 

Many LCOs have not yet revoked the license

**Based on all analysis explained, here below are our recommendations to the NBTC to encourage more competition in the ex-ante markets.**

## Recommendations to Encourage More Competition in the Market

### License Relevant Market Players

There are still some market players who are not licensed by the NBTC. Therefore, in order to be fair and create level playing field, **the NBTC should ask those players to apply for relevant licenses.** Please also note that the broadcasting license is also required when providing transmission service to broadcasting licensees.

### Transmission Market

The nature and characteristic of transmission service and market is the same as that of telecom and it is part of all ex-ante markets as supporting service. So, it is recommended that **the NBTC separate transmission market for broadcasting from ex-ante markets.**

### Blur Boundary between Pay TV and Free TV

We have found out that the expansion of DTT is affecting the Pay TV market particularly in the lower segment i.e. Analog Cable TV. It is recommended **the NBTC should re-delineate the retail market boundary** in light of current market and technological development.

### Price Squeeze Test on Pay TV

As a dominance player in Pay TV market may exercise its power with regard to pricing, the **NBTC may apply ex-ante measure by implementing “price/margin squeeze test”** to ensure proper pricing on both wholesale input and retail price.

**Based on all analysis explained, here below are our recommendations to the NBTC to encourage more competition in the ex-ante markets.**

## Recommendations to Encourage More Competition in the Market

### Regulate DTT Mux and Facility

Mux charge should be reviewed due to more sharing of network infrastructure to not allow collective dominance players enjoy unfair advantages. **The NBTC should revise the regulated Mux price and impose price regulation on facility services.**

### Internet License to LCO

As the cable Pay TV business offered by the LCOs particularly smaller ones is in downturn as the number of subscribers and revenues have been decreasing during the last 2-3 years. To support the small player business, **the NBTC can help facilitate the licensing rules to enable LCOs to offer internet service in some ways.**

### Dead LCOs

Based on the LCO and phone interviews, we have found a number of LCOs already stop their business and operation. However, they have not yet revoked the license. So, it is recommended **to all those LCOs to contact the NBTC to revoke the license** to avoid any obligations and penalties.

### Reduce Broadcasting License Fee

Based on the interview with 30 LCOs, most of them are small operators when comparing to the dominance player in the market. They all ask for **reduction of broadcasting licensee fee rates** so that they can better compete in the market.