



TELECOMMUNICATIONS POLICY & REGULATORY FRAMEWORK

Telecommunications Policy and Resources
Management Bureau

MR. PRATOMPONG SRINUAN

- TELECOMMUNICATION CLUSTER -

OFFICE OF THE NBTC



TABLE OF CONTENTS

.....

Telecommunications Policy & Regulatory Framework

01

Master Plan

Overview of the 3rd Telecom Master Plan (2024-2028)

03

Targets

Strategic Targets & KPIs

02

Strategies

Five Strategic Pillars

04

Progress

Implementation Status & Progress (2024-Present)

SECTION 1

The 3rd Telecommunications
Master Plan (2024 – 2028)

- Overview -

[More Details ...](#)



The 3rd

TELECOM MASTER PLAN

Office of
the NBTC



VISION

The 3rd Telecommunications Master Plan (2024 - 2028)



“

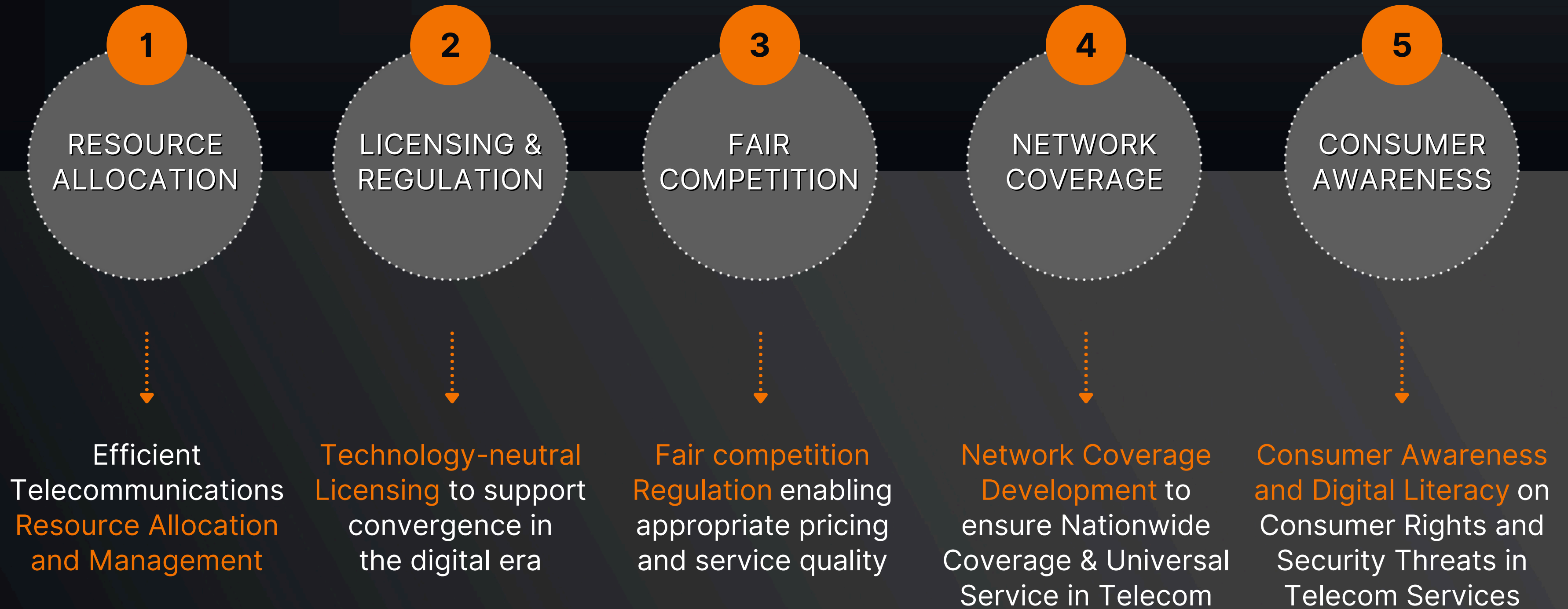
To drive Thailand's Telecommunications Industry and enhance Universal Service based on Accessibility, Affordability, and Availability Factors of Telecommunications Services for the Sustainable Development of the Digital Economy and Society.

”

MISSION

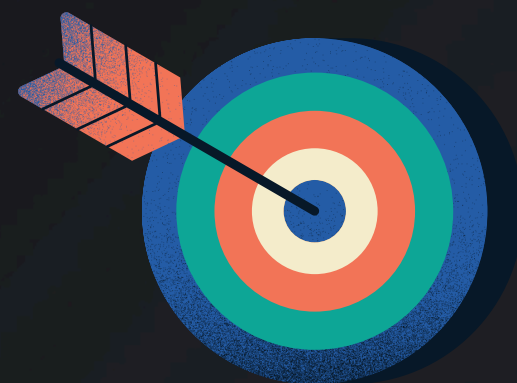


The 3rd Telecommunications Master Plan
(2024 - 2028)



OBJECTIVES

Equity Access to Telecom Resources | Equipment Standard |
QoS & Price | Secure Access | National Security



1

Resources

Fair & Transparent Access to
Telecom Resources

2

Standard

Radiocommunication & Telecom
equipment, complying with
standards

Manufacturing | importing | distributing

3

QoS & Price

Equitable Access to
Quality Telecom Services
at Reasonable Prices

4

Secure Access

Equitable and Secure Access
to Telecom Services

5

National Security

Safeguards Against Radio Freq.
Spectrum & Telecom Equipment
Utilization Impacts

The 3rd Telecommunication
Master Plan (2024 - 2028)

SECTION 2

The 3rd Telecommunications
Master Plan (2024 – 2028)

- Strategies -

[More Details ...](#)



The 3rd

TELECOM MASTER PLAN

Office of
the NBTC



STRATEGIES



- Fair Competition
- Digital Divide & Universal Access
- Telecom Resource Allocation
- Licensing & Regulations
- Consumer Protection & Digital Literacy

The 3rd Telecommunication
Master Plan (2024 - 2028)

FAIR
COMPETITION

1

To foster a **Competitive Environment** and enable **New Entrants** into the Telecom Markets

DIGITAL DIVIDE
& UNIVERSAL
ACCESS

2

To bridge **the Digital Divide** and promote **Universal Access** to Telecom Services

TELECOM
RESOURCE
ALLOCATION

3

To ensure **Efficient Allocation and Management of Telecom Resources** with Optimal Utilization, achieving Maximum Benefit

LICENSING &
REGULATIONS

4

To establish **Licensing Regimes & Regulatory Frameworks** appropriate to the Digital Industry Ecosystem

CONSUMER
PROTECTION
& DIGITAL
LITERACY

5

To strengthen **Consumer Protection & Digital Literacy** in the Digital Era

SECTION 3

The 3rd Telecommunications
Master Plan (2024 – 2028)

- Targets -

[More Details ...](#)



The 3rd

TELECOM MASTER PLAN

Office of
the NBTC





TARGETS

STRATEGY 1 : FAIR COMPETITION

The 3rd Telecommunications Master Plan
(2024 - 2028)

TARGET
1

To increase Competition & Market
Entry in the Telecom Markets



New Entry in Telecom Markets
& **Infra-Sharing Guidelines/
Measures** Establishment

TARGET
2

To create Fair Competition
in the Telecom Markets



**Fair Competition
Mechanisms**

To prevent monopolistic practices or unfair competition



TARGETS

The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 2 : DIGITAL DIVIDE & UNIVERSAL ACCESS

TARGET

1

To enhance **High-Performance Telecom Network** Development



5G Network Coverage & Availability of Fixed Broadband High-Speed Internet

TARGET

2

To implement **Universal Service Obligation (USO)** Plans



Success Rate on the USO Plans

TARGET

3

To enhance **High-Speed Internet Service** Accessibility



Special Promotion for High-Speed Internet Services to enhance its Accessibility

TARGET

4

To promote **Digital Literacy & Technology Adoption**



Modern Telecom Technology Utilization among Underserved Populations and across Industrial Sectors



TARGETS

The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 3 : TELECOM RESOURCE ALLOCATION

TARGET
1

To efficiently allocate **Spectrum Resource**
for Radiocom & Telecom Services



IMT Spectrum Roadmap
Implementation & Review of
Spectrum Allocation
Approaches and Utilization

TARGET
2

To efficiently allocate **Telecom**
Numbering Resources



Success Rate on **Numbering**
Allocation Approaches
To promote efficient utilization of allocated telecom numbering
resources



TARGETS

The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 4 : LICENSING & REGULATIONS

TARGET

1

TARGET

2

TARGET

3

TARGET

4

To establish a **Licensing Regime** that accommodates Technological Convergence in the Digital Era



Modern **Laws, Licensing & Regulatory Frameworks** Establishment

To enhance **Service Standards** and **Licensing Facilitation**



Success Rate on **Digital Technology Implementation** to facilitate the Licensing Processes

To drive **Collaboration Mechanisms & Data Integration System**



Integrated Systems & Collaboration Mechanisms across the Public-Private Sectors to support regulatory frameworks

To enhance **Emergency Warning System Capabilities** through Telecom Services



An Efficient Emergency Warning System Establishment by the government and relevant agencies



TARGETS

The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 5 : CONSUMER PROTECTION & DIGITAL LITERACY

TARGET
1

To broaden **Public Awareness**
on Consumer Rights & Cybercrime
Threats on time



Awareness-raising Mechanism &
Channels Availability on Consumer
Rights and Cybercrime Threats

TARGET
2

To create **Public Confidence** in
Telecom Services



Efficient **Consumer Protection
Mechanisms** Establishment

TARGET
3

To monitor and regulate
Fair Treatment for Consumers
in Telecom Services



Efficient Treatment and
Communication Mechanisms
& **Clear Service Information**
for Consumers in Telecom
Services, covering Prices and QoS

TARGET
4

To establish **Secure Identity
Verification** in Transactions



Identity Verification through
Mobile ID

TARGET
5

To encourage
Consumer Participation



To enhance **Creation Mechanism of
Consumer Networking** for enabling
Information Exchange and Active
Roles across the Relevant
Public Sectors

SECTION 4

The 3rd Telecommunications
Master Plan (2024 – 2028)

- Progress -

[More Details ...](#)



The 3rd

TELECOM MASTER PLAN

Office of
the NBTC

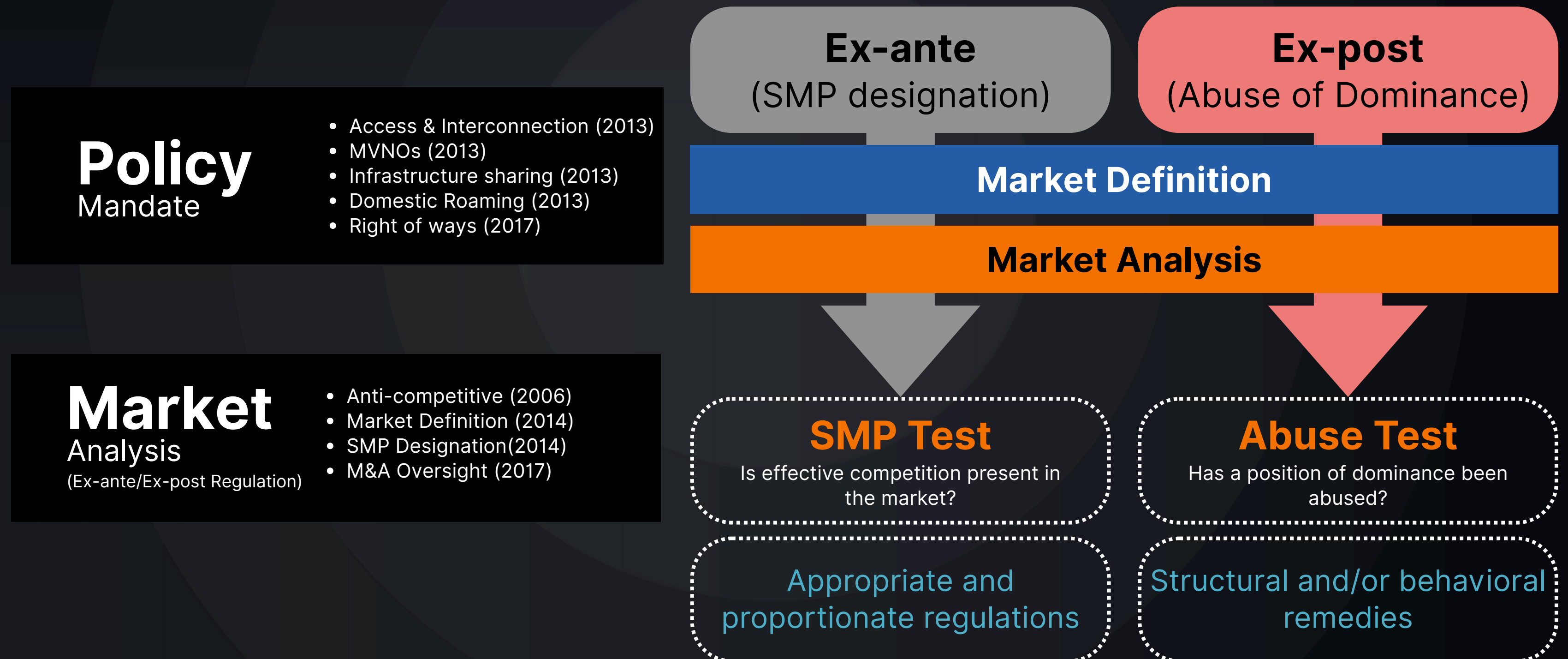


PROGRESS



The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 1 : FAIR COMPETITION

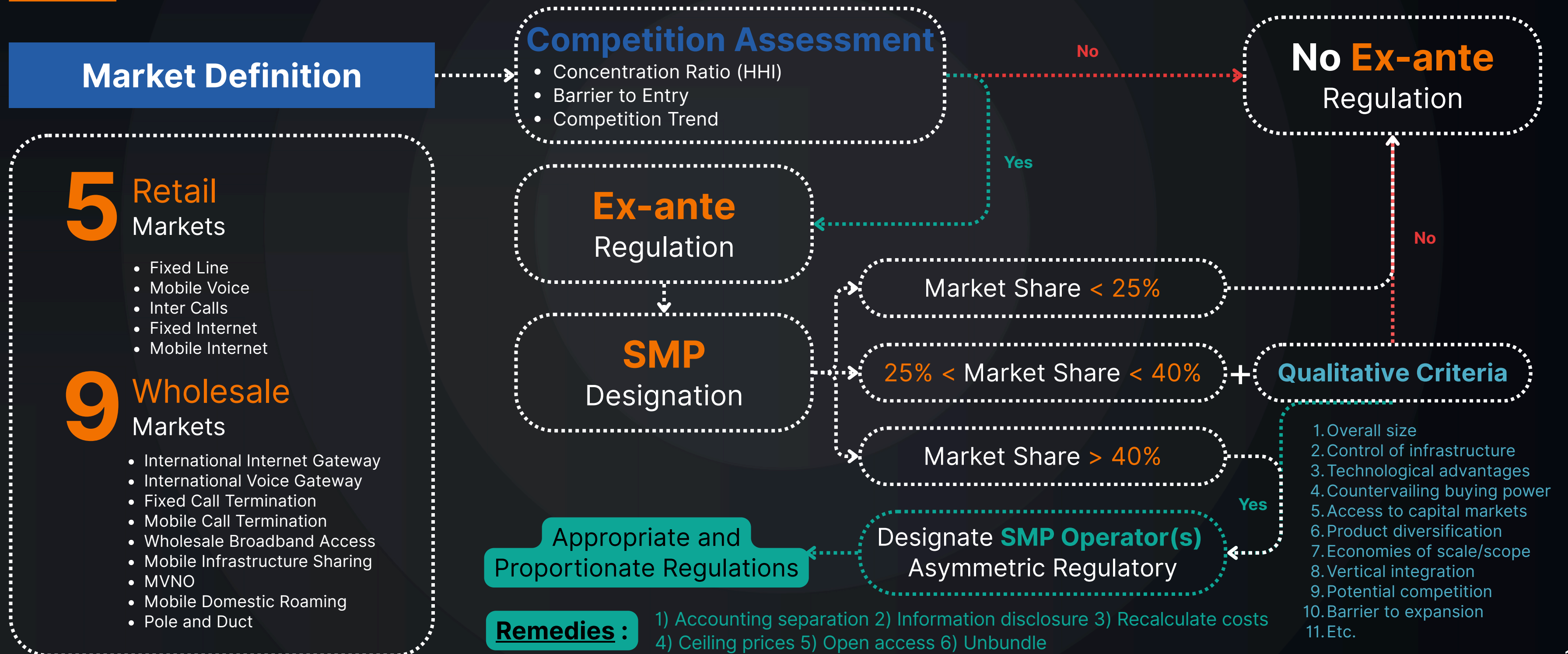


PROGRESS



The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 1 : FAIR COMPETITION



PROGRESS

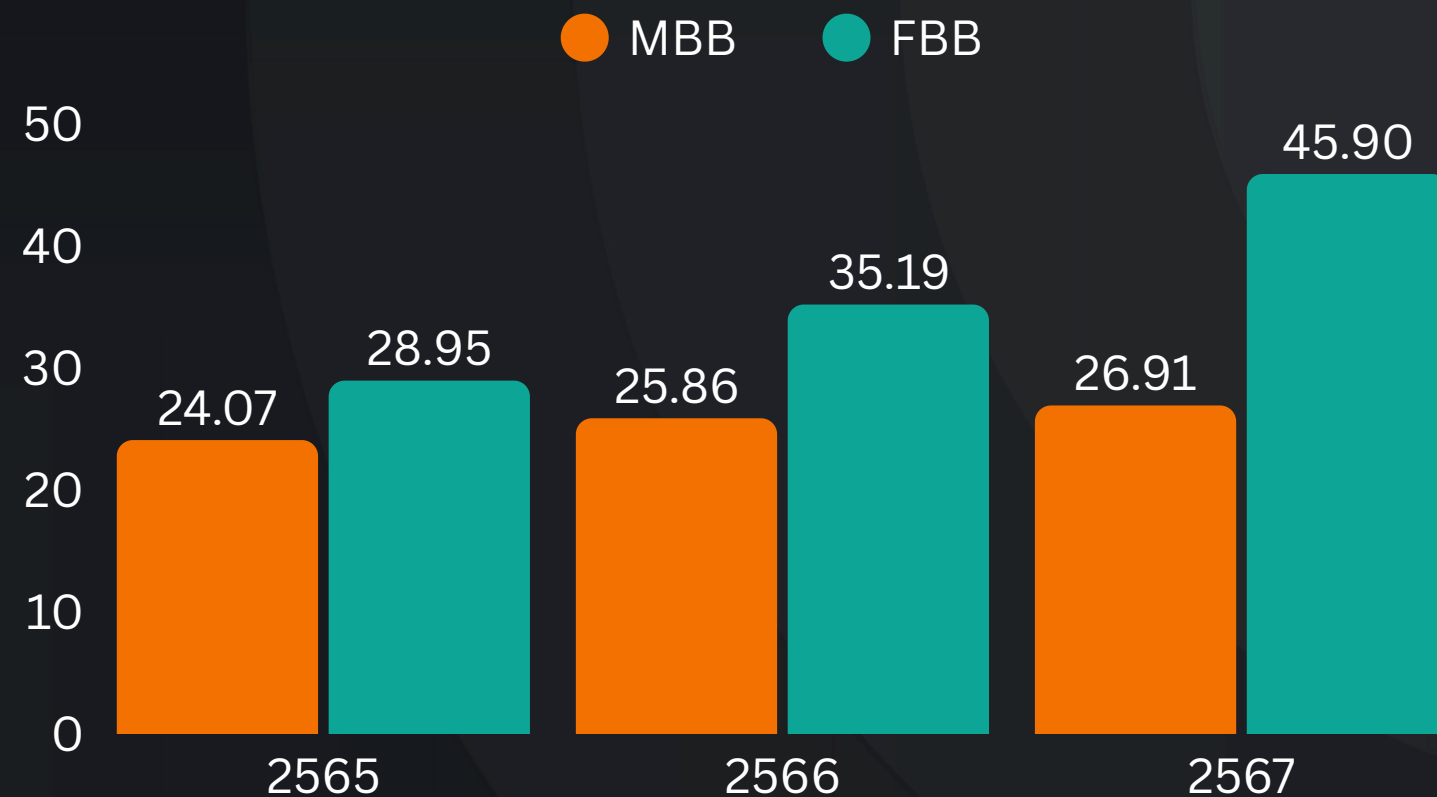


The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 1 : FAIR COMPETITION

OUR CURRENT STATUS

Domestic Internet Bandwidth (Ebps)



Infrastructure Deployment

(2565 | 2566 | 2567)

FBB

Broadband Penetration per Household : **44.57%** | **36.28%** | **36.63%**

Broadband Penetration per Population : **19.01%** | **15.75%** | **16.18%**

MBB

3G Network: **99.80%** | **98.80%** | **98.80%**

4G Network: **98.10%** | **98.10%** | **98.10%**

5G Network: **85.40%** | **89.00%** | **95.00%**

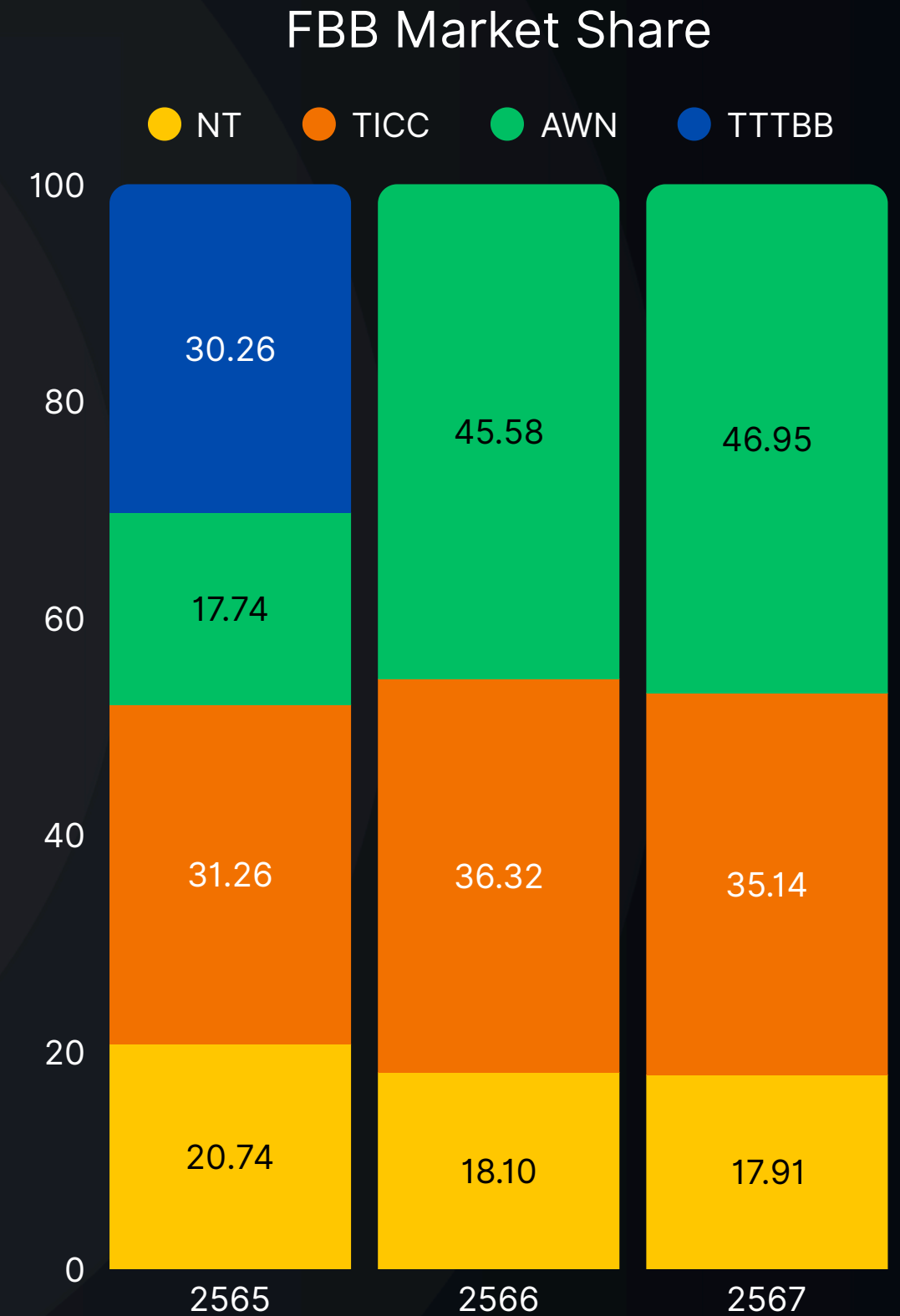
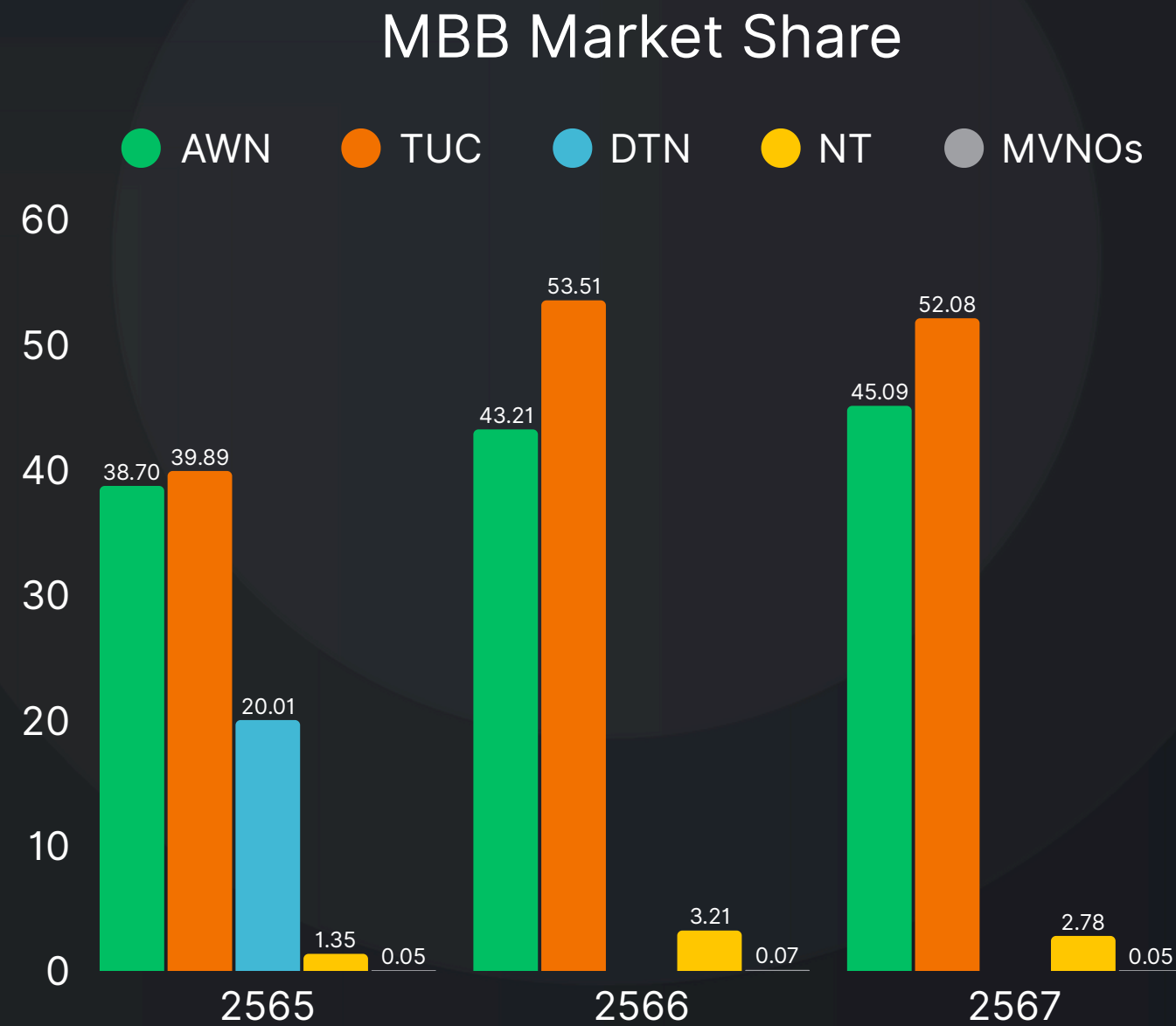
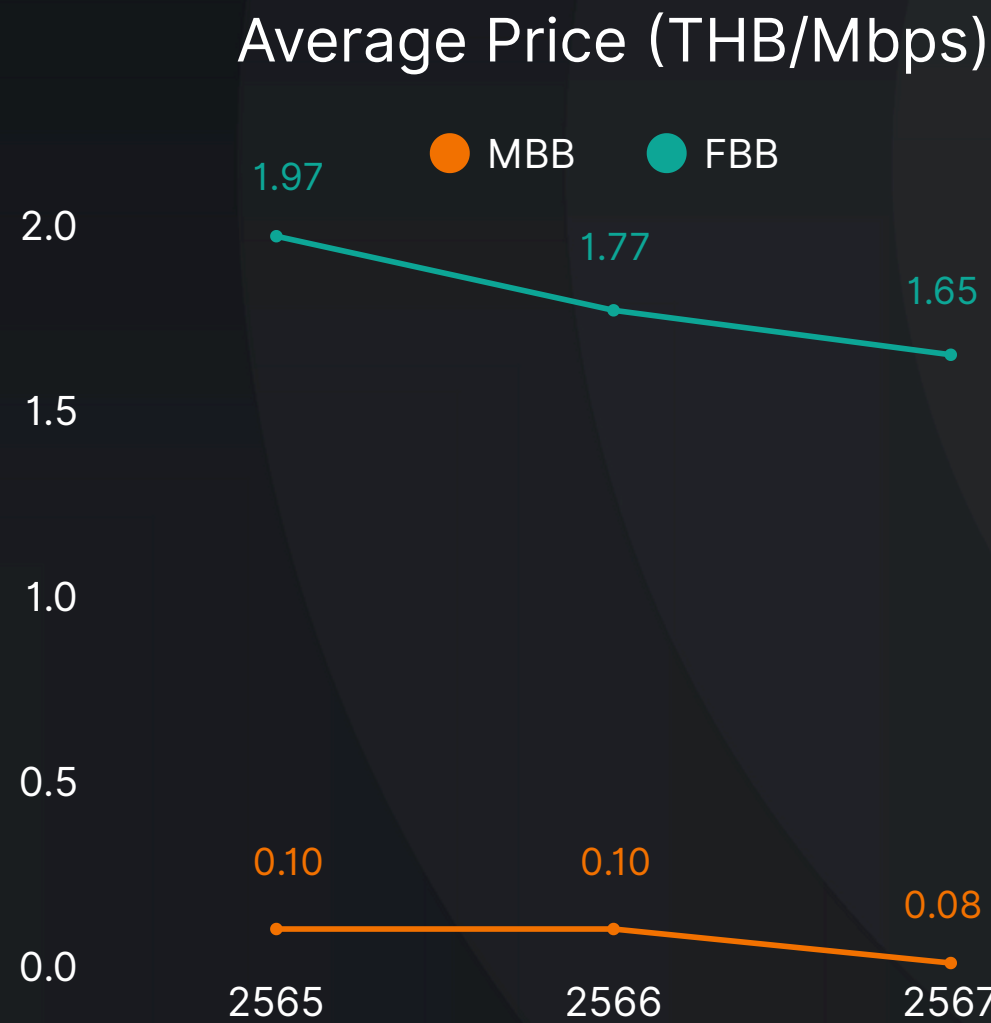
PROGRESS



The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 1 : FAIR COMPETITION

OUR CURRENT STATUS



PROGRESS



The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 2 : DIGITAL DIVIDE & UNIVERSAL ACCESS

Digital Divide & Universal Access

- USO Plans (No. 1 - 4)
- Network Coverage

UNIVERSAL SERVICE OBLIGATION

"PROJECT ON TELECOMMUNICATION INFRASTRUCTURE DEPLOYMENT EXPANSION FOR THAILAND'S ECONOMIC DRIVE"

The project was aimed at Broadband Internet Service Expansion to improve service coverage throughout the country for targeted group of people in specific villages and public areas.



Village WiFi
18,773 Points



USO Net Center
991 Points



USO Wrap Center
1,623 Points



School WiFi
4,380 Points



Local Hospital WiFi
198 Points

The 1st USO Plan
(2012 - 2016)

Service Coverage
in Zone C+

The 2nd USO Plan
(2017 - 2021)

Continue developing
service coverage and expanding to
social dimensions such as
telehealth and digital literacy

The 3rd USO Plan
(2022)

Focus on service adoption
in other dimensions such as
public health, public services,
and security

The 4th USO Plan
(2023)

Continue promoting service adoption
in other dimensions such as
education, public health,
public services, and security

UNIVERSAL SERVICE OBLIGATION

NBTC pursues Universal Service Obligation mission by implementing Universal Service Obligation Masterplan. We value concept of availability, affordability, and accessibility to increase coverage throughout the targeted areas as well as to enhance digital literacy and service adoption among targeted groups.

- Geographical Dimension**
Coverage expansion of universal telecom service in geographical dimensions
- Social Dimension**
Support and promotion of universal service access, service adoption, and digital literacy enhancement

Dimensions: AVAILABILITY, AFFORDABILITY, ACCESSIBILITY

Services: DAISY (Digital Accessible Information System), TTRS (Thailand's Telecommunication Relay Services), National Single Emergency Number (191), Telehealth



PROGRESS



The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 2 : DIGITAL DIVIDE & UNIVERSAL ACCESS

Digital

Divide & Universal
Access

- USO Plans (No. 1 - 4)
- Network Coverage

5G CASE STUDY: SIRIRAJ 5G SMART HOSPITAL PROJECT

Timeline:

- Late 2020: 5G committee approved the project
- Jan. - Dec. 2021: Project implementation and trial (with 8 subprojects)
- 16 Dec. 2021: Opening ceremony
- Jun. 2022: Performance report submitted to NBTC

Key Facts:

- Siriraj Hospital is the largest public hospital in Thailand and one of the largest hospitals in Southeast Asia.
- Siriraj Hospital uses the 5G Technology, Cloud, AI, and Digital Disruption to bring more efficient and convenient experience to patients and be a role model for other hospitals in Thailand to develop and transform into smart hospitals.

1st release of 5G Self-Driving vehicle

SIRIRAJ World Class 5G Smart Hospital
16 December 2021

In Dec. 2021, the Prime Minister attended the opening ceremony and gave opening speech project "Siriraj World Class 5G Smart Hospital"

Coverage by Technology

Technology	Frequency Bands	Chachoengsao, Chonburi and Rayong	Bangkok Metropolitan Region	Nationwide
3G	850 MHz, 900 MHz, 2100 MHz	95.70%	100%	96.12%
4G	700 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2600 MHz	95.70%	99.99%	98.01%
5G	700 MHz, 26 GHz	95.70%	99.99%	83.03%
Overall Coverage		95.70%	100%	98.77%

Source : data from 2 telecom operators at Feb. 2024

PROGRESS

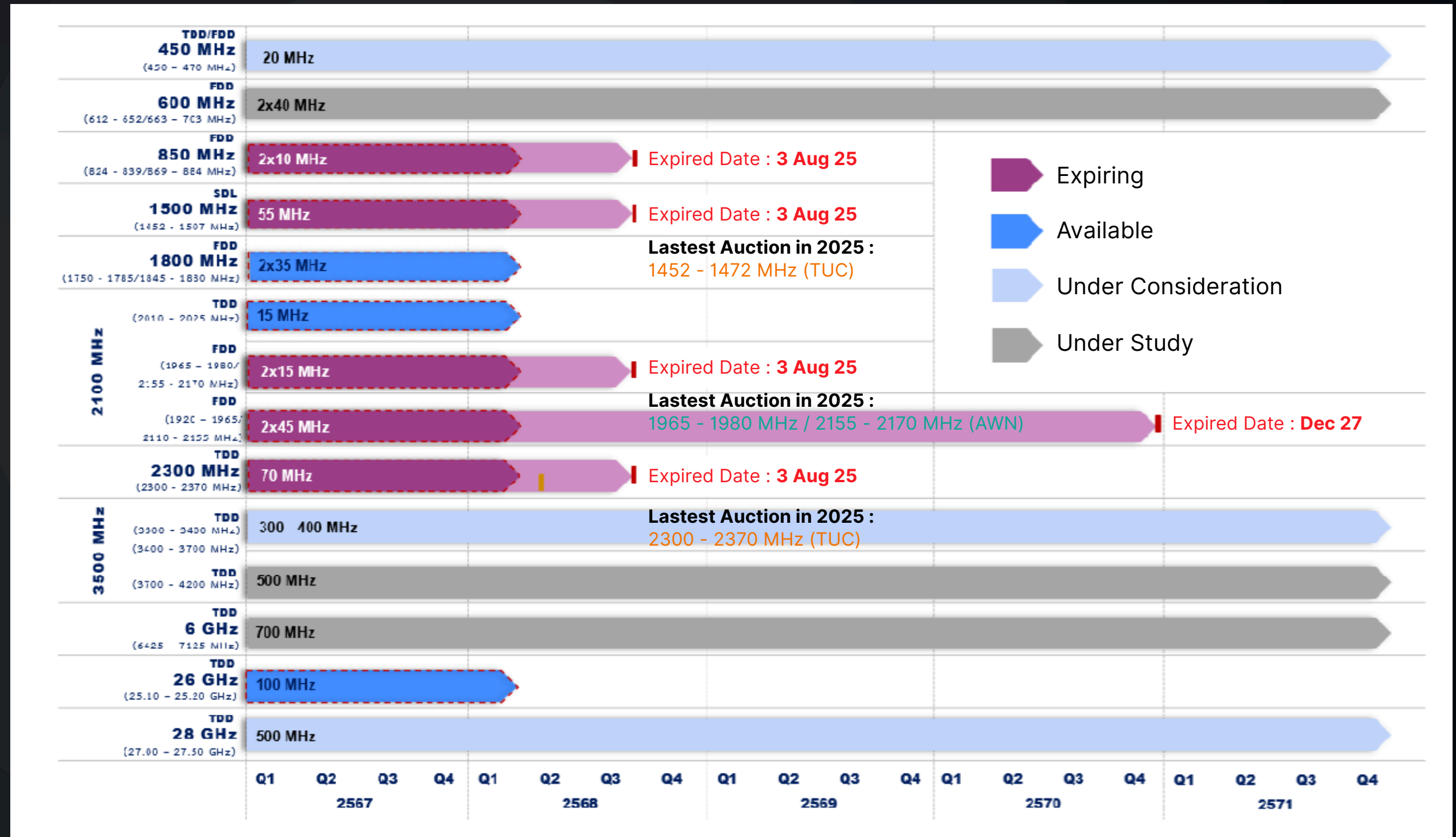


The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 3 : TELECOM RESOURCE ALLOCATION

Telecom Resource Allocation

- IMT Spectrum Roadmap
- IMT Spectrum Auctions
- Numbering Allocation



PROGRESS

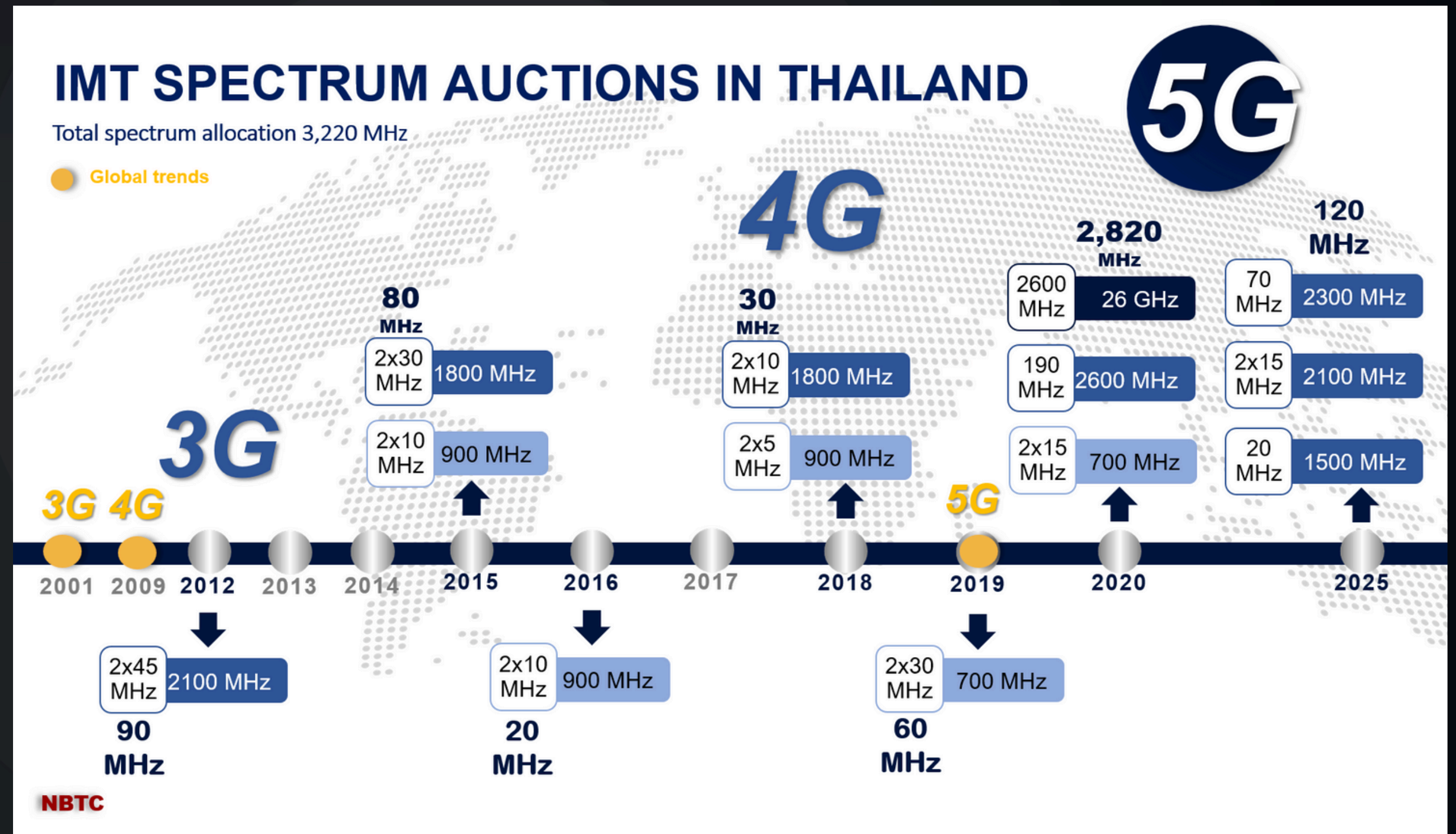


The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 3 : TELECOM RESOURCE ALLOCATION

Telecom Resource Allocation

- IMT Spectrum Roadmap
- IMT Spectrum Auctions
- Numbering Allocation



PROGRESS



The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 3 : TELECOM RESOURCE ALLOCATION

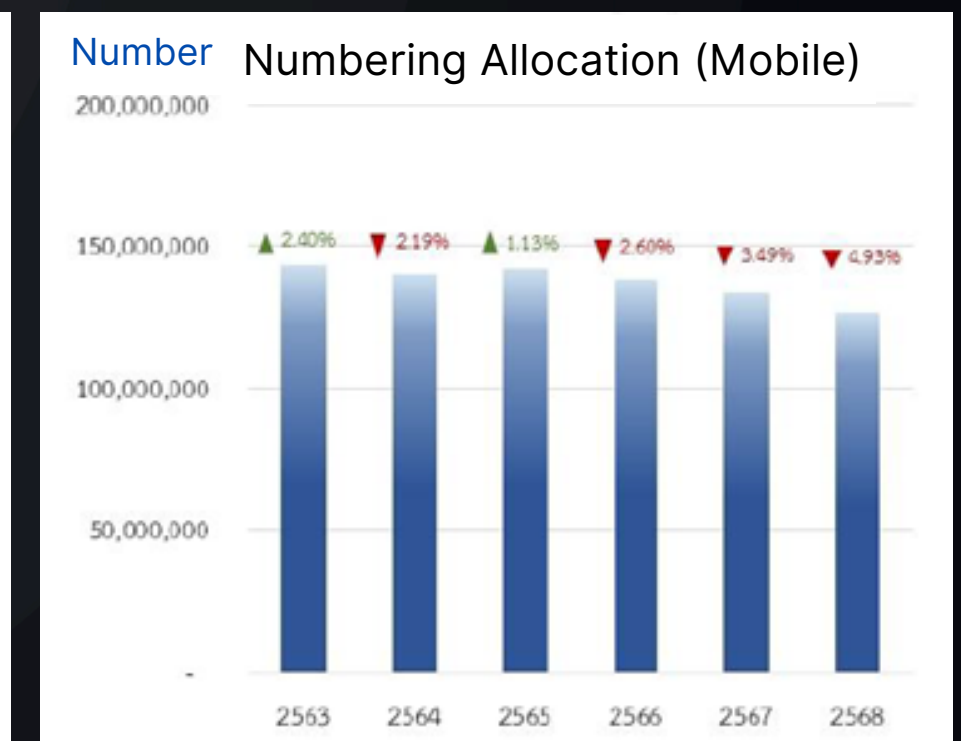
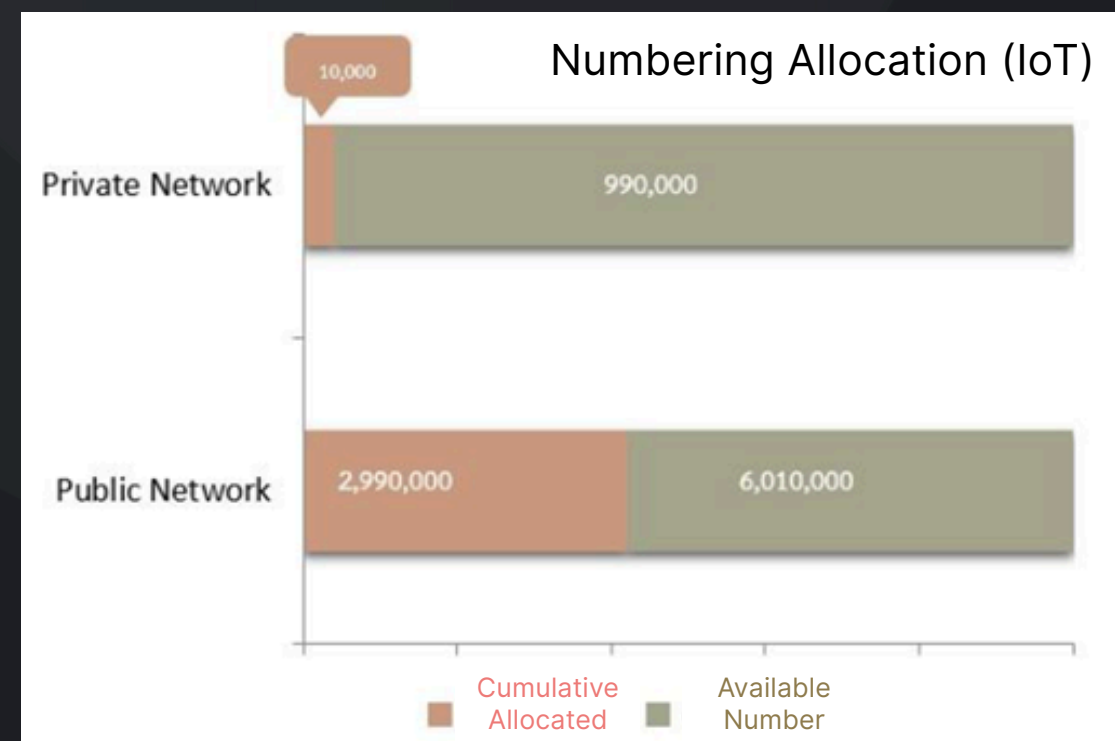
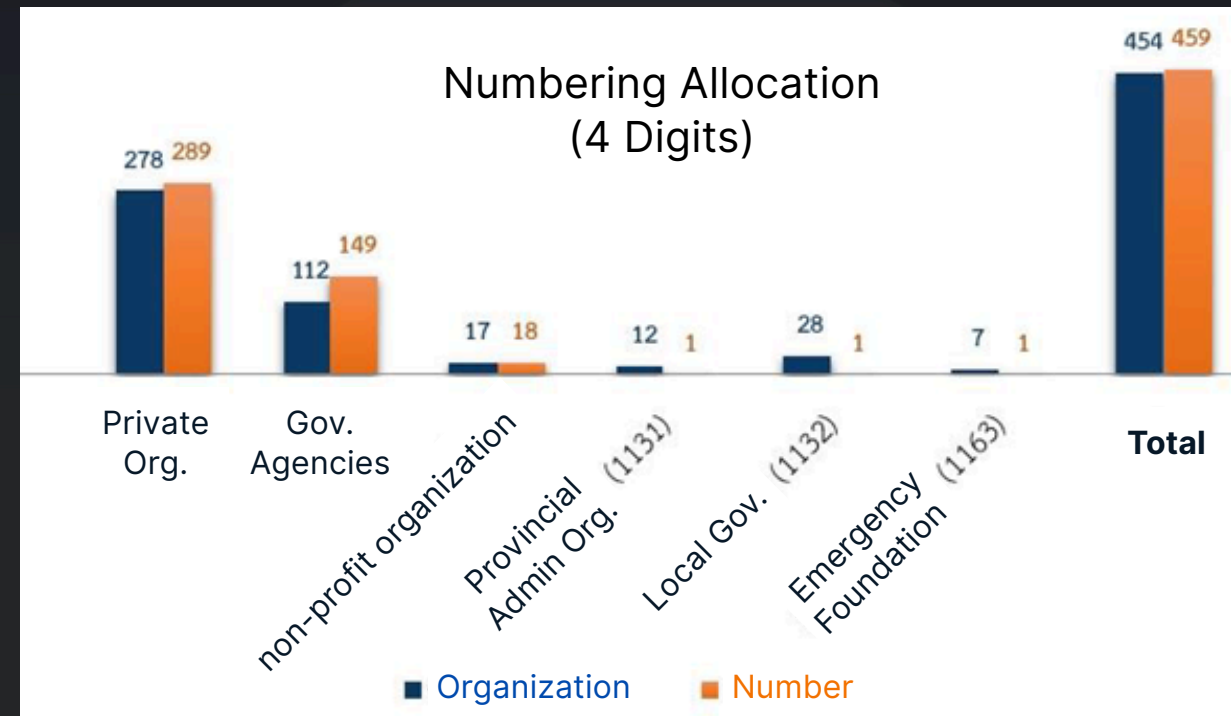
Telecom Resource Allocation

- IMT Spectrum Roadmap
- IMT Spectrum Auctions
- Numbering Allocation

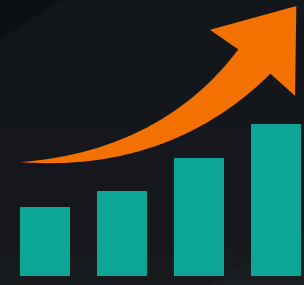
Anti-SCAM Calls & SMS

Cybercrime Prevention Measures :

- SIM Card Registration
- Maximum SIM Card Holding
- Usage Limits in Telecom Services
- International Calling Prefix Designation (+697/+698)
- Rejection Incoming International Calls (*138*1#/*138#2#)



PROGRESS



The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 4 : LICENSING & REGULATIONS

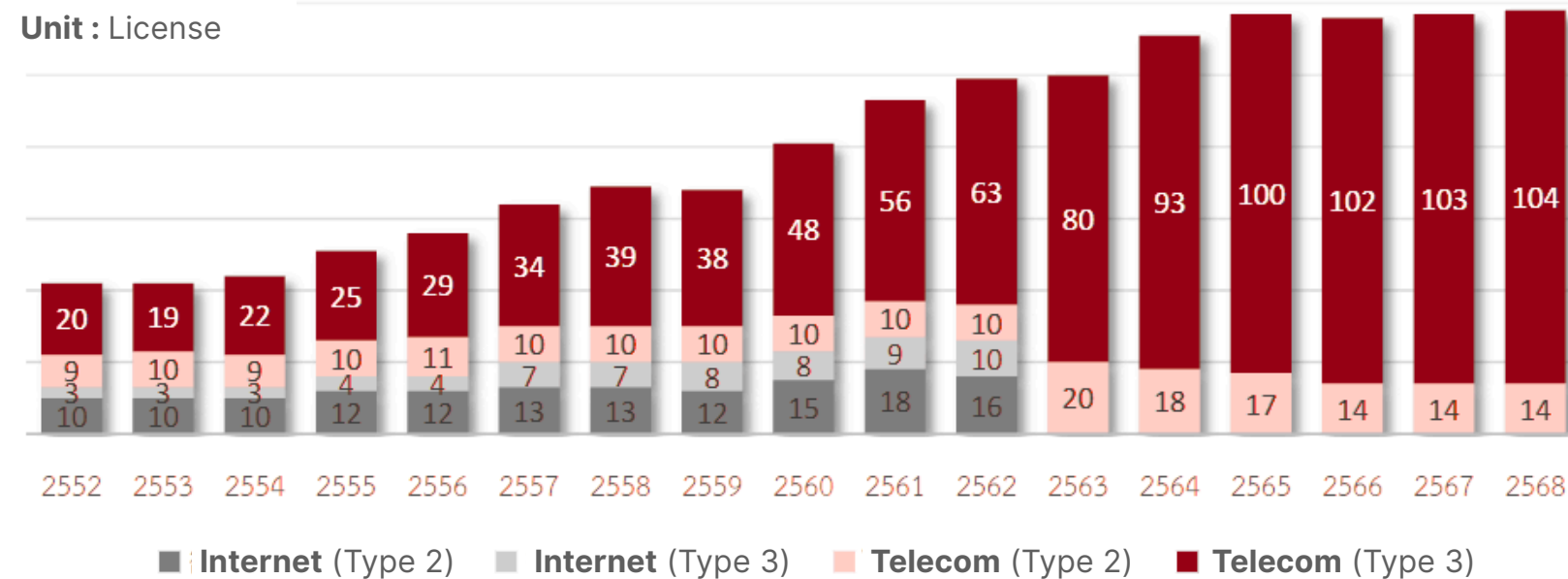


Telecom Licensing & Regulations

- Licensing Trends
- Regulatory Measures and Other Measures
- Collaboration Mechanisms and Systems Development

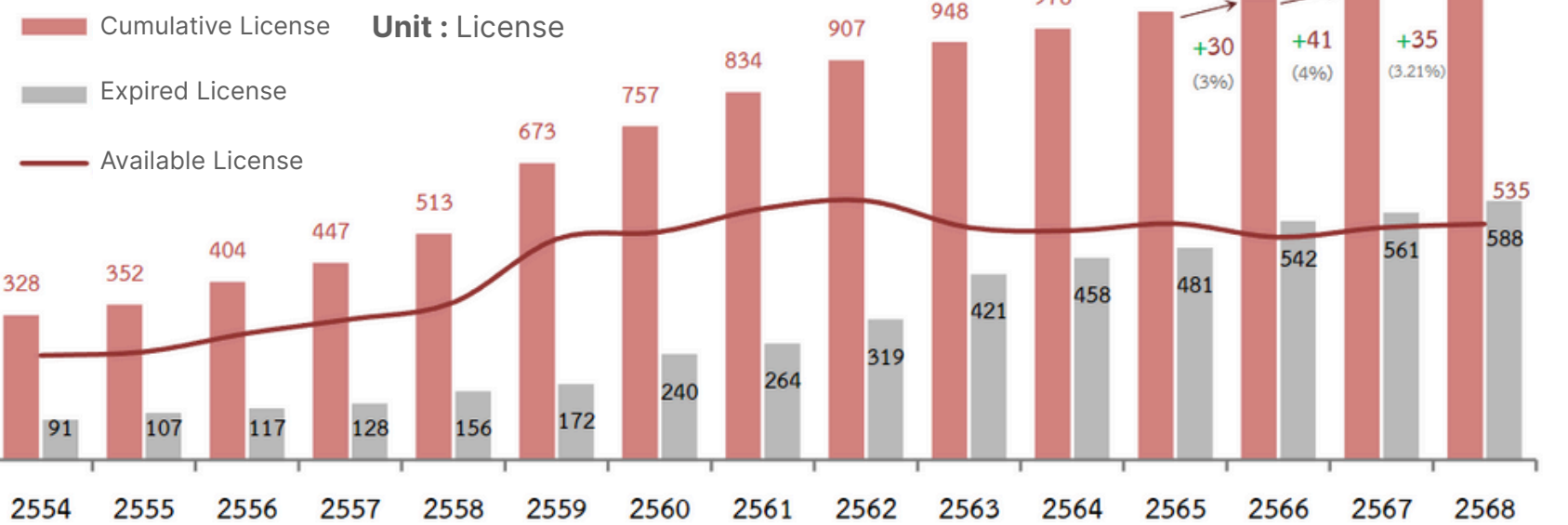
Facilities-Based Business License

Unit : License



Services-Based Business License

Unit : License



PROGRESS

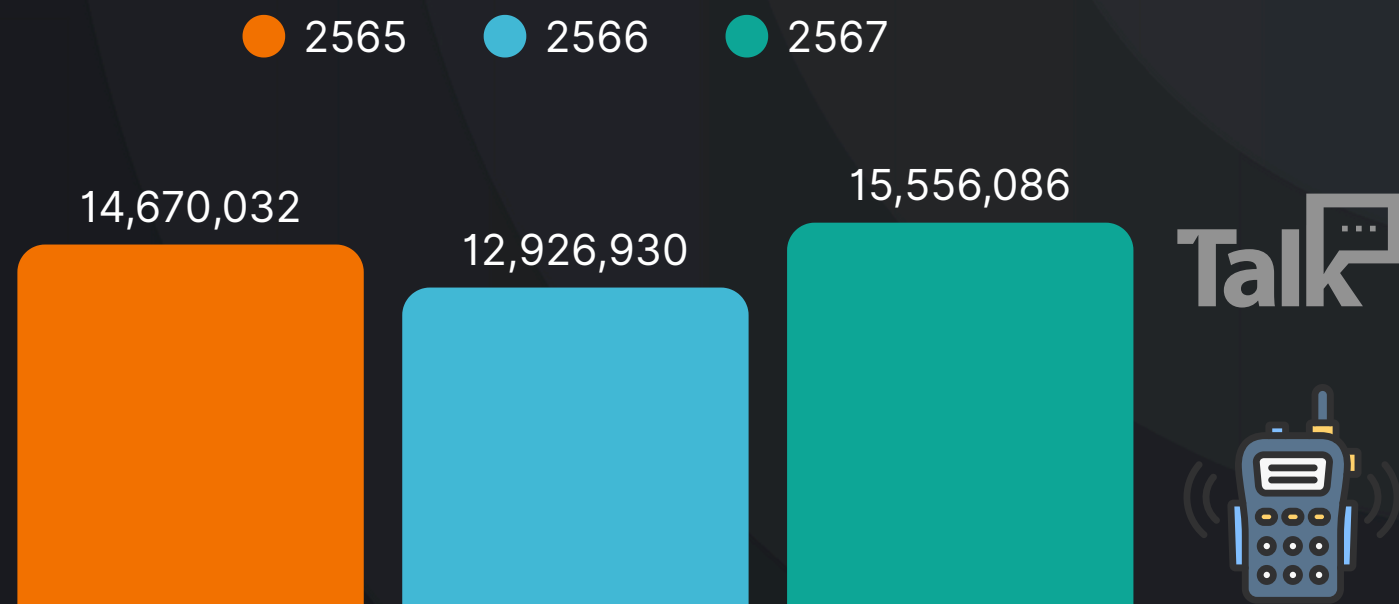
The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 4 : LICENSING & REGULATIONS

Telecom Licensing & Regulations

- Licensing Trends
- Regulatory Measures and Other Measures
- Collaboration Mechanisms and Systems Development

(Import) Radiocommunications and Telecommunications Devices



Ref. : Thailand National Single Window (NSW)



Regulatory Measures

in Radiocommunications & Telecommunications Services



PROGRESS



The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 4 : LICENSING & REGULATIONS

Telecom Licensing & Regulations

- Licensing Trends
- Regulatory Measures and Other Measures
- Collaboration Mechanisms and Systems Development



Law Enforcement

in Radiocommunications & Telecommunications Services

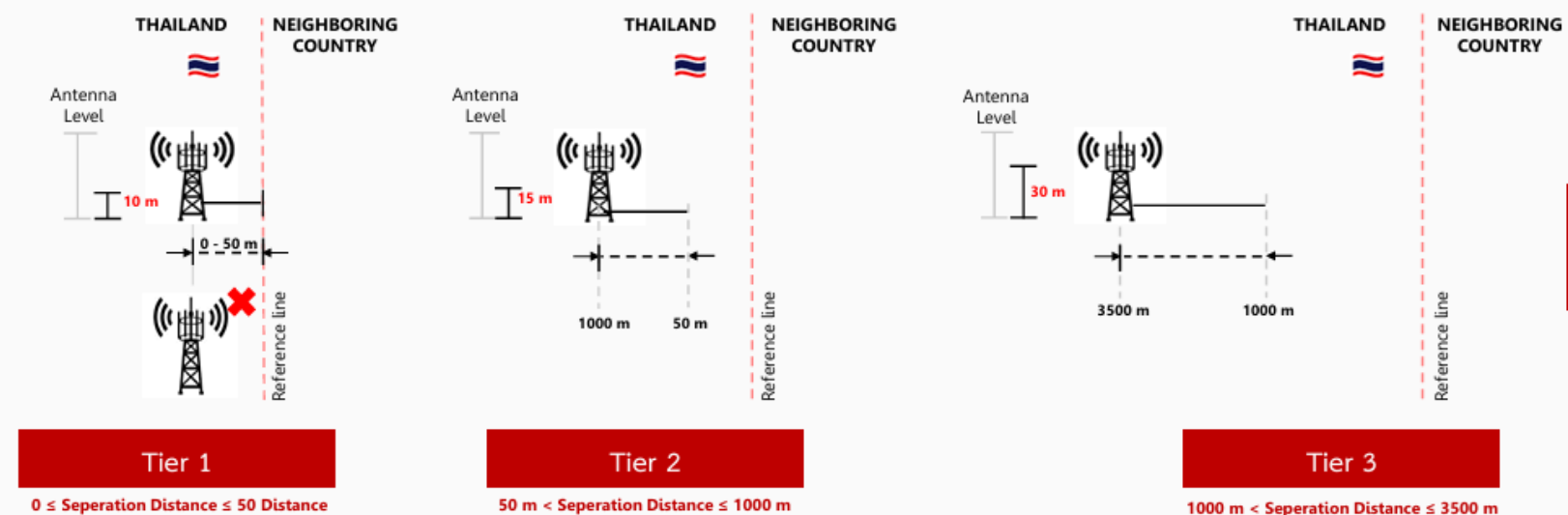
Thailand's Proactive Measures Against Cybercrime



Mobile Network Operators (MNOs) have to restrict Antenna Height near neighboring country border

1

separated into 3 separation distance from border reference line :



Reducing Antenna height to limit signal spillover.

Additional Measures

(Cybercrime Prevention Measures)

PROGRESS



The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 4 : LICENSING & REGULATIONS

Telecom Licensing & Regulations

- Licensing Trends
- Regulatory Measures and Other Measures
- Collaboration Mechanisms and Systems Development

To enhance Emergency Warning System Capabilities through Telecom Services

” Cell Broadcast System ”



PROGRESS



The 3rd Telecommunications Master Plan
(2024 - 2028)

STRATEGY 5 : CONSUMER PROTECTION & DIGITAL LITERACY

Telecom

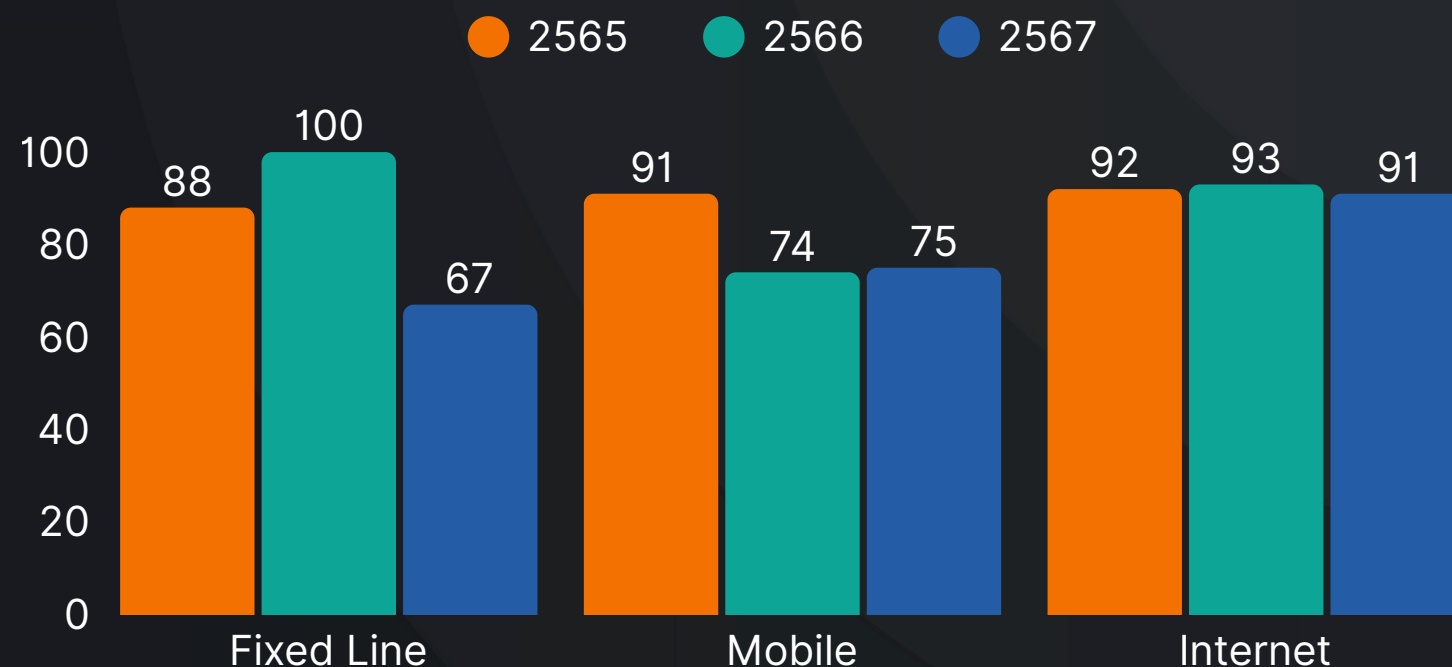
Consumer Protection
& Digital Literacy

- Consumer Protection
- Public Awareness Strengthen

Public Awareness



Complaint Success Rate (%)



8 Anti-SCAM Measures

- SIM Card Registration
- Maximum Limits of SIM Card Holding
- Usage Limits in Telecom Services
- International Calling Prefix Designation (+697/+698)
- Rejection Incoming International Calls (*138*1#/*138#2#)
- Abnormal User Behavior Monitoring
- Suspension of Suspicious Services
- Regulation of SIMBOX and Gateway equipment usage

THANK YOU

Q & A