



Balancing policy, regulation, independence and WTO commitments

Exemplar practice and ASEAN case studies

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Outline of WPC's Presentation

- 1. ASEAN markets overview
- 2. Regulatory commitments under the WTO framework
- 3. Defining regulator powers
- 4. Defining regulator responsibilities
- 5. Regulatory challenges in a converging sector

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Regional overview of ASEAN

ASEAN characterized by high rates of mobile penetration and low rates of fixed telephone and broadband penetration. Competition is generally effective, and ICT development is growing rapidly, although remains behind the global average.

- Mobile penetration is above 100% for all countries (highest is 153% in Singapore) with the exception of Myanmar, which has very low penetration of 11.1%.
- Generally there are a large number of mobile operators (e.g. 9 operators in Malaysia, 9 operators in Indonesia, 6 operators in Viet Nam). However, market usually dominated by 3 major operators.
- Most markets allow and encourage MVNOs, with the exception of Brunei, Lao PDR, Myanmar and the Philippines.
- ASEAN is generally below the global average in terms of ICT development according to the ITU. Singapore, Brunei and Malaysia are above average.

Penetration and population in ASEAN countries (2013)

Member	Fixed telephone subs per 100 pop	Mobile subs per 100 pop	Fixed broadband subs per 100 pop	Mobile broadband subs per 100 pop	Population ('000)
Brunei D.	13.6	112.2	5.7	6.5	422
Cambodia	2.8	133.9	0.2	10.1	15,458
Indonesia	16.1	121.5	1.3	36.0	253,609
Lao PDR	10.0	66.2	0.1	2.4	6,803
Malaysia	15.3	144.7	8.2	14.1	30,073
Myanmar	1.0	12.8	0.2	1.0	58,840
Philippines	3.2	104.5	2.6	27.2	101,833
Singapore	36.4	155.6	25.7	136.6	5,076
Thailand	9.0	138.0	7.4	52.5	66,720
Viet Nam	10.1	130.9	5.6	21.8	90,549



Competitors in ASEAN markets

Member	Participants (Fixed)	Participants (Mobile)	MVNO Allowed? (Number)
Brunei	1	2	No
Cambodia	1	7	Yes
Indonesia	3	9	Yes
Lao PDR	1	4	No
Malaysia	3	9	Yes (12)
Myanmar	1	4	No
Philippines	2	2	No
Singapore	2	4	Yes
Thailand	3	5	Yes (5)
Viet Nam	11.4	6	Yes



ICT development scores in ASEAN countries (2013)

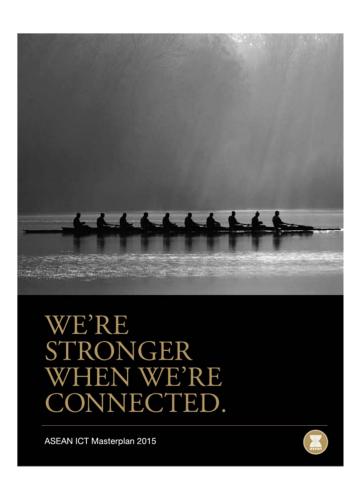
Member	ASEAN rank	Global rank	Score
Singapore	1	13	7.85
Brunei D.	2	66	5.43
Malaysia	3	71	5.20
Thailand	4	81	4.76
Viet Nam	5	101	4.09
Philippines	6	103	4.02
Indonesia	7	106	3.83
Cambodia	8	127	2.61
Lao PDR	9	134	2.35
Myanmar	10	150	1.82
ASEAN average			4.20
Global average			4.77

ASEAN ICT Masterplan 2015

All ASEAN members have committed to the ASEAN ICT Masterplan 2015. Masterplan is a broad policy-framework that guides ASEAN member ICT development over five years. The policy has informed development of ICT sector in all countries.

Members have committed to a single strategic vision of enabling ASEAN's social and economic integration. Ultimate goal is to establish a single communications market. By 2015, the following key outcomes have been set:

- ICT as an engine of growth for ASEAN countries.
- Recognition for ASEAN as a global ICT hub.
- Enhanced quality of life for peoples of ASEAN.
- Contribution toward ASEAN integration.



Key components

Key components of the ASEAN Masterplan. Competition policy and regulation plays fundamental role in promoting sector growth and investment, as well as social goals of affordability and engagement.

Economic transformation

- Create conducive business environment to attract trade, investment and entrepreneurship in ICT sector.
- Framework of harmonised and transparent ICT regulations.

 Coordination with regulatory practices in other member countries.

People engagement and empowerment

- Devote resources to improvement of quality of life for ASEAN people.
 Promote affordable ICT, especially in low-income and remote areas.
- May take the form of incentives and grants. Promote the attractiveness of new technologies.

Infrastructure development

- ASEAN members have committed to establishing Broadband Corridor. Develop locations that offer best connectivity, enable seamless usage of broadband services across region.
- ASEAN Internet Exchange Network scheduled for completion.

Bridging the digital divide

- Address imbalance of development among member countries to close the gap.
- Members have agreed to renew USO policies and commit to including IT components and training as part of funding.

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Market access and national treatment commitments

Sector-specific commitments are made regarding *market access*, *national treatment* and *additional commitments*. Members make commitments on *market access* and *national treatment* with respect to four modes of supply:

- Cross border supply (supply of a service from one country to another where no movement of the supplier to the recipient country is involved (e.g. a person in country A buying a product from country B through an ecommerce means such as eBay)
- 2. Consumption abroad (e.g. a national of country A traveling to country B and consuming services in country B as in the case of a tourist or a person shopping overseas)
- Commercial presence (i.e. supplier of a service from country A traveling to or setting up a physical presence in country B in order to provide the service in country B as in the case of a foreign supermarket chain such as Big C setting up a branch in country B)
- 4. Presence of natural persons (i.e. supplier of a service from, say country A to country B, having an individual or an employee in country B who is not a national of country B in order to supply the service such as a foreign shopkeeper operating in country B)

Reference Paper on telecommunications services

As part of joining the WTO, countries must commit to the Reference Paper on telecommunications services. The Reference Paper provides additional principles for the regulation of the telecommunications sector along with the horizontal and sector-specific commitments under the GATS framework.

New WTO members are bound by the Reference Paper (sometimes with negotiated transition measures). The Reference Paper covers six core regulatory areas:

- 1. Competitive safeguards
- 2. Interconnection
- 3. Universal service
- 4. Public availability of licensing criteria
- 5. Independent regulators
- 6. Allocation and use of scarce resources

Purpose of the Reference Paper

The Reference Paper provides a set of principles covering the six regulatory areas listed in the previous slide. This includes principles that may not be essential for the technical fulfillment of the general market access and national treatment obligations.

These principles also help to facilitate compliance with the member country's horizontal and Schedule C commitments, and to promote confidence in the government's commitment, as well as sector development and investment.

The Reference Paper was produced by the Negotiating Group on Basic Telecommunications of the WTO in 1996 to serve as the baseline for regulatory standards in the telecommunications sector. These commitments were not mandatory for founding WTO members. However, new members are effectively required to commit to them.

Competition commitment

Countries must ensure that appropriate measures are in place to prevent anti-competitive practices:

1. Prevention of anti-competitive practices in telecommunications

Appropriate measures shall be maintained for the purpose of preventing suppliers who, alone or together, are a major supplier from engaging in or continuing anti-competitive practices.

2. Safeguards

The anti-competitive practices referred to above shall include in particular:

- Engaging in anti-competitive cross-subsidization.
- Using information obtained from competitors with anti-competitive results.
- **Not making available** to other services suppliers on a timely basis technical information about essential facilities and commercially relevant information which are necessary for them to provide services.

Interconnection commitment

With respect to interconnection, the WTO Reference Paper states:

1. This section applies to linking with suppliers providing public telecommunications transport networks or services in order to allow the users of one supplier to communicate with users of another supplier and to access services provided by another supplier, where specific commitments are undertaken.

2. Interconnection to be ensured

Interconnection with a major supplier will be ensured at any technically feasible point in the network. Such interconnection is provided:

Under **non-discriminatory** terms, conditions (including technical standards and specifications) and rates and of a quality no less favourable than that provided for its own like services or for like services of non-affiliated service suppliers or for its subsidiaries or other affiliates;

Interconnection commitment (cont.)

- In a timely fashion, on terms, conditions (including technical standards and specifications) and cost-oriented rates that are transparent, reasonable, having regard to economic feasibility, and sufficiently unbundled so that the supplier need not pay for network components or facilities that it does not require for the service to be provided; and
- Upon request, at points in addition to the network termination points offered to the majority of users, subject to charges that reflect the cost of construction of necessary additional facilities.
- 3. Public availability of the procedures for interconnection negotiations

The procedures applicable for interconnection to a major supplier will be made publicly available.

4. Transparency of interconnection arrangements

It is ensured that a major supplier will make publicly available either its interconnection agreements or a reference interconnection offer.

Interconnection commitment (cont.)

5. Dispute settlement

A service supplier requesting interconnection with a major supplier will have recourse, either:

- At any time; or
- After a reasonable period of time which has been made publicly known

to an **independent** domestic body, which may be a **regulatory body**, to resolve disputes regarding appropriate terms, conditions and rates for interconnection within a reasonable period of time, to the extent that these have not been established previously.

Universal service commitment

With respect to universal service, the WTO Reference Paper states:

Any Member has the right to define the kind of universal service obligation it wishes to maintain. Such obligations will not be regarded as anti-competitive per se, provided they are administered in a transparent, non-discriminatory and competitively neutral manner and are not more burdensome than necessary for the kind of universal service defined by the Member.

Licensing commitment

With respect to licensing, the WTO Reference Paper states:

Where a licence is required, the following will be made publicly available:

- All the licensing criteria and the period of time normally required to reach a decision concerning an application for a licence, and
- The terms and conditions of individual licences. The reasons for the denial of a licence will be made known to the applicant upon request.

Commitment regarding allocation and use of scarce resources

With respect to licensing, the WTO Reference Paper states:

Any procedures for the allocation and use of scarce resources, including frequencies, numbers and rights of way, will be carried out in an objective, timely, transparent and non-discriminatory manner. The current state of allocated frequency bands will be made publicly available, but detailed identification of frequencies allocated for specific government uses is not required.

This commitment applies to both frequency spectrum resources (which must be managed by the government in the public interest) as well as other scarce resources such as numbers, addresses and rights of way.

The WTO Reference Paper does not state that key spectrum and other resources must be subject to market- or price-based forms of allocation and assignment. However, all resources must be managed in an **objective**, **timely**, **transparent and non-discriminatory** manner.

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Need for regulator powers

Powers are granted to regulatory bodies to ensure the efficient regulation of the communications sector and to achieve the government's policy goals. There is general consensus that the optimal structure for a regulator is an independent body with powers and a mandate designed for the converged communications market.

The telecommunications sector is of economy-wide importance, with sector growth contributing directly to national GDP as well as providing productivity enhancements that flow through to all sectors. Telecommunications is also essential to promote social and economic inclusion, and management of the sector is important from a national interest and public safety perspective.

It is therefore essential that a sector regulator be adequately equipped to manage the sector in the interest of end-users and the country as a whole. Regulatory flexibility is also essential in order to:

- Manage public resources such as spectrum, numbers, etc.
- Achieve any-to-any interconnection between networks, and resolve disputes
- Avoid interference between networks and provide for PPDR
- Regulate access and sharing between operators and ensure sustainable comeptition
- Provide for universal service mechanisms, tariff regulation, etc.

Common regulator powers

Power	Explanation
Moral persuasion	Often used in conjunction with the implicit threat that if this method of altering behaviour fails more direct action will be taken by the regulator.
Investigate compliance	All regulators studied have the power to conduct investigations and to gather information generally about licensees they regulate. This can include <i>inter alia</i> assessment of QoS results and auditing of reported data.
Application of US funds	Regulators are able to intervene in the market by providing funds towards projects which they believe important or necessary based on certain criteria.
Advise Minister and recommend reforms	Many regulators have as part of their functions an advisory role to the government body responsible for telecommunications policy. This can serve as a means of indirect enforcement where regulators wish to change behaviour but do not explicitly have the power to do so.
Issue warnings	Where regulators have detected a breach of regulations, laws or rules but do not want to impose penalties they issue a warning. This is typically for first and minor offences, or where regulations are new or changed and the operator has a good history of compliance.
Issue directives or regulations	A step up from issuing warnings where licensees are issued with directions, directives or regulations with which they must comply. Penalties for breach of such directives are usually severe.
Impose fines	Regulators often exercise the power to impose fines or otherwise compel payment from licensees in order to discourage certain behaviour.
Revoke licence	Regulators have the power to revoke licenses they have granted. This has only ever been used in extreme circumstances involving serious repeated breaches of regulations and laws.

Principles for an effective regulatory body

In order for regulators to function effectively, the market must have confidence in both the final regulatory decisions as well as the decision-making process itself. An effective regulatory body is built on the following principles:

- Transparency: Actions and decisions taken by the regulator are based on objective criteria and made available to the public. Internal operation of the regulator is based on clear constitutional arrangements.
- Non-discrimination: All market participants are treated equally and given the same rights and obligations. Due process is upheld. Licensees have recourse to administrative and judicial review.
- **Competitive neutrality**: Regulator promotes competition between public and private businesses and ensure government-owned businesses do not enjoy competitive advantages merely by virtue of their public ownership.
- **Efficiency**: Regulator is able to act expediently, make decisions in a timely manner, respond to market developments and maximise value of scarce resources.

Regulator powers in the context of broader market reform

The establishment of a sector-specific regulatory body has generally been seen as an important part of market liberalisation and reform. Globally, countries have implemented reforms in communications markets that include restructuring (and often privatising) incumbent operators, introducing competition, and updating regulatory frameworks.

In this context, the sector regulator has often been given key responsibilities for managing the sector and enforcing aspects of the relevant laws and regulations. The regulator also has a number of other responsibilities, including the transmission of information to the government and the public, and monitoring of the telecommunications market.

Regulators will have varying degrees of autonomy. However, in most markets, the regulator is a separate entity distinct from the Ministry or Department, and exercises certain powers independently, although is ultimately answerable to the Minister and parliament.

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Defining regulator responsibilities

Typical regulator responsibilities

Typically, regulators are responsible for the implementation of national regulatory policy, enforcing aspects of the relevant telecommunications legislation including interconnection, tariff regulation, and allocating scarce resources (spectrum and numbers).

The regulator will also have a number of other enabling responsibilities, including the transmission of information to the government and the public, and monitoring of the telecommunications market.

The regulator operates within the legislative framework established by the Parliament or Government. Typically the ministry, as distinct from the sector regulator, will have an overriding responsibility for communications policy at a national level. The ministry will have various responsibilities conferred on it by the legislature including development of national telecommunications policy.

Regulator mandates

Regulators typically take on responsibility for three core objectives:

- 1. Sector regulation: The regulator is responsible for implementing and enforcing key regulations, including interconnection, licensing, infrastructure sharing and tariffing. The regulator may also have responsibility for enforcing sector competition provisions.
- **2. Spectrum management**: The regulator is responsible for spectrum planning, developing and enforcing equipment standards, managing interference and cross border coordination, and assigning and allocating spectrum rights.
- **3. Promotion of sector development**: The regulator will generally be responsible for promoting affordability and accessibility of services, universal service regulation, access to key national infrastructure, the collection of key industry data, and the provision of advice to the government.

The power given to regulators to achieve these objectives may be broad (e.g. they may have discretion under the law to make regulations governing all aspects of the sector), or they may be narrow (e.g. they may have limited responsibility or may be able to act only with Ministerial approval).

Summary of key regulator responsibilities

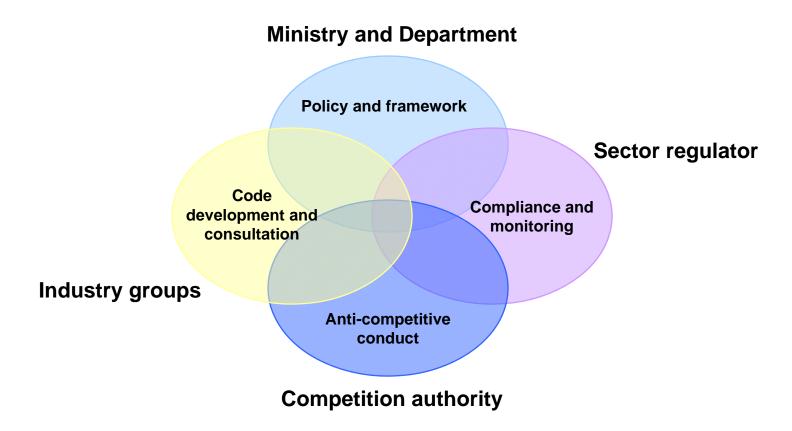
Area	Description	
Spectrum management	Overall role of regulator is to ensure efficient use of spectrum resources that maximises economic and social benefits. Regulator is responsible for management, allocation and assignment of frequencies and has power to make or amend rules within the legislative framework.	
Numbering	Regulator is responsible for maintaining the national telecommunications numbering scheme, including telephone numbers, as well as other addresses such as domain names.	
Competition	Regulator is responsible for enforcing competition provisions of legislation, including collusion among service providers, anti-competitive conduct and misuse of market share. This responsibility is typically performed in conjunction with the competition regulator.	

Summary of key regulator roles

Role	Activity
Monitoring and assessment	 Monitoring of market and assessment of trends, economic analysis including the state of competition Consideration of consumer outcomes including service availability, pricing and quality Proactive assessment of compliance with regulations Assessment of escalated consumer and stakeholder complaints, including referrals from other regulatory bodies
Investigation	
Enforcement	 Imposition of penalties where breach of regulations, licence conditions or standards is found; Education to promote compliance and reduce regulatory burden Independent and transparent dispute settlement procedures Negotiation along with graduated enforcement of penalties which are commensurate with degree of non-compliance
Arbitration	
Consultation	 Review of existing regulatory framework, consultation with industry stakeholders Issuance of guidelines to assist stakeholders in understanding and complying with rules Development of industry codes of regulatory and self-regulatory practice
Development	

Need for clear division of responsibilities

This clear delineation of responsibilities should be accompanied by comprehensive policies and processes for dealing with any potential overlap of regulatory activity. Clear delineation is necessary in order to minimise instances of shared or conflicting responsibility, however, such instances are inevitable.



Degrees of regulator autonomy

Degree of regulator independence	Description	Examples
Autonomous	The regulator is independent from the government and may exercise full discretion over those aspects that fall within its mandate.	Australia, Malaysia, Korea, Singapore, Brunei, Hong Kong
Semi-autonomous	The regulator has some discretion over certain aspects, but some aspects may ultimately be subject to ministerial approval, or the minister may reserve the right to intervene.	Indonesia, Philippines, Thailand, Cambodia, India
Separate body within ministry	The body may have specialised knowledge and expertise in dealing with the sector, but is in essence controlled by the ministry.	Japan, Vietnam, Myanmar (legislation requires independence by 2015)
No special body	Sector regulation is undertaken primarily by a competition and consumer authority and the courts.	New Zealand

Thailand's regulatory framework

The Telecommunications Business Act (2001) and the Act on Organisation to Assign Radio Frequency and to Regulate the Broadcasting and Telecommunications Services (2000) constitute Thailand's modern regulatory framework. The Acts establish the National Broadcasting and Telecommunications Commission ('NBTC') (formerly the National Telecommunications Commission), which has extensive powers in relation to the management of the sector.

The Acts also establish Thailand's licensing framework, including provisions relating to competition, access and interconnection, equipment and standards, and the setting of maximum fee and tariff rates.

Previously the two state-owned enterprises, CAT Telecom and TOT, acted as quasi-licensing bodies, with private operators required to negotiate BTO concession agreements through there two operators. The NBTC has since taken greater control over the licensing regime, with the award of 2.1 GHz spectrum through the 2012 auction being allocated directly to private operators.

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Regulatory challenges in a converging sector

Convergence and the rise of IP applications

Convergence in the telecommunications sector has meant countries have begun to re-evaluate how regulatory layers are defined, including how best to structure licence categories. The simplest model involves only two layers - content and carriage. In short, convergence means:

- The growing focus of new businesses will be content-rich and data-intensive applications, including VoIP and IPTV services, driven by the ubiquity of a range of smart mobile and tablet devices.
- The challenge for the government will be to ensure that the regulator has the capacity to deal with these changes, and to facilitate the investment required to drive these new business models. Best practice regulation acknowledges the converging nature of technology.
- It no longer makes sense to subject different forms of media to separate regulation. Countries are now faced with the need to create new convergent frameworks that provide better-targeted regulation, consistent standards across platforms and that support emerging services and innovation in the ICT sector.

Regulatory challenges in a converging sector

Impact of OTT services

The mobile services market as a whole is facing increasing pressure from Internet-based data services. OTT services create opportunities as well as threats for traditional operators, and from a regulatory perspective will require an evaluation of existing regulatory frameworks. OTT providers are disrupting the market. This is because:

- OTT providers are driving large increases in traffic, predominantly via streaming and video download. They are also creating new consumer experiences (based on traditional mobile services, like IP-based data and voice communication services, but also new services).
- OTT players generate most of their revenue from third party advertisements, which effectively creates consumer expectations for 'free' or very low-cost services.

While attention may be given to encouraging new operators to enter the market and/or access existing network infrastructure, OTT services are already starting to provide effective competition with mobile operators. A key challenge in relation to current licensing approaches is in relation to Internet and OTT services, which are extra-territorial in nature and often will have no facilities within a jurisdiction.

Regulatory challenges in a converging sector

Thailand and convergence

By taking on responsibility for both sectors, the NBTC is able to plan and develop policy responses for the market as a whole, and is in a better position to adapt to convergence within the market (including the rise of OTT services replacing traditional broadcast and telecommunications services).

OTT services are growing in Thailand. Messaging app LINE is symbolic of this growth, with over 33 million registered users in Thailand. LINE and similar apps are providing new ways to connect users, and are now also significant ecommerce and payments platforms.

This raises significant policy and legal questions?



Thank you I am happy to answer any questions