

OTT SERVICES IN INDIA

U K SRIVASTAVA

Principal Advisor (Network, Spectrum & Licensing)

TRAI, India



Some Relevant Quotes

“An entrepreneur searches for change, responds to it and exploits opportunities. Innovation is a specific tool of an entrepreneur hence an effective entrepreneur converts a source into a resource.”

— PETER DRUCKER

“Laws should be like clothes. They should be made to fit the people they are meant to serve”

— CLARENCE DARROW



What is Over-The-Top (OTT) service?

- Applications and services which are accessible over the internet and ride on operators' networks offering internet access services
- Three types of OTT– Communications, Video content, Application eco system.
- Two broad categories of services– communications & non-communications
- Three broad public policy issues- Regulatory imbalances; impact on economy & Security issues.



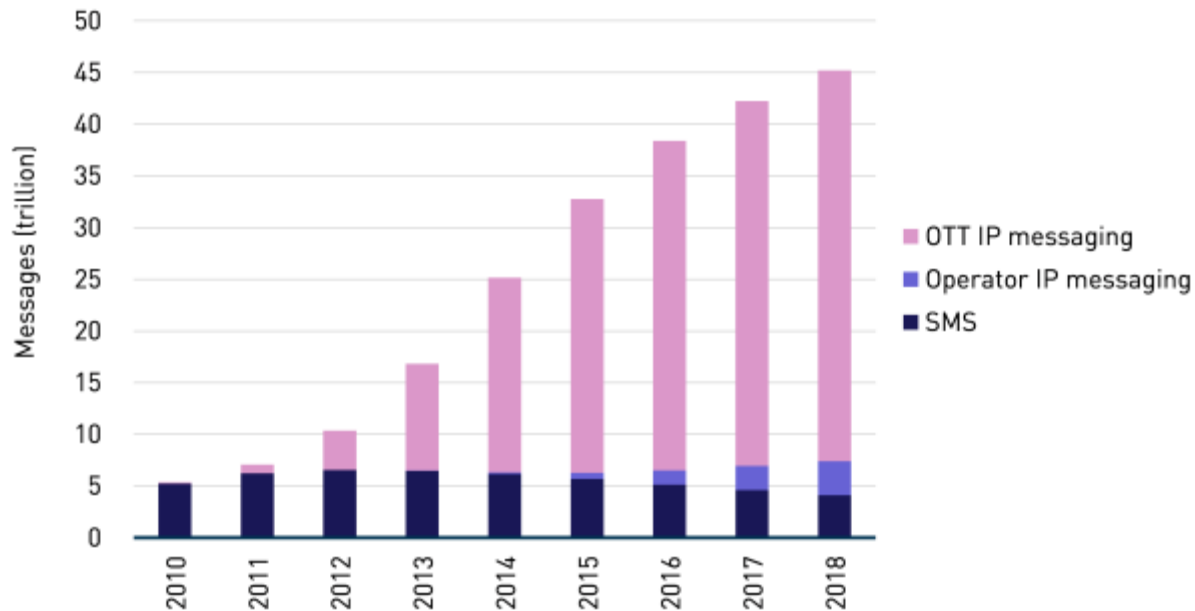
Growth of OTT....

- The rapid growth of OTT services has raised a number of national policy issues relating to regulatory imbalances & security concerns that need to be addressed.
- The regulatory imbalances need examination at various levels by different agencies of Government.
- In addition, public safety and privacy issues require attention.



International Messaging Traffic- SMS vs OTT

Messages sent via mobile handsets by service type, worldwide, 2010–2018

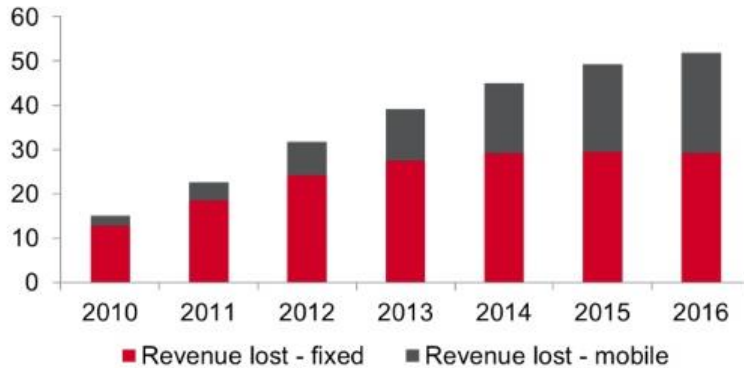


[Source: Analysys Mason, 2014]

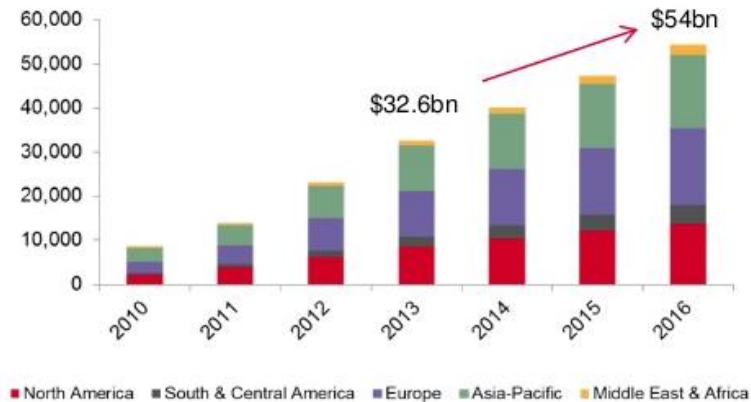


Network Operators' Revenues Lost to OTT Players

Telco revenues lost to OTT VoIP: 2010–16 (US\$bn)



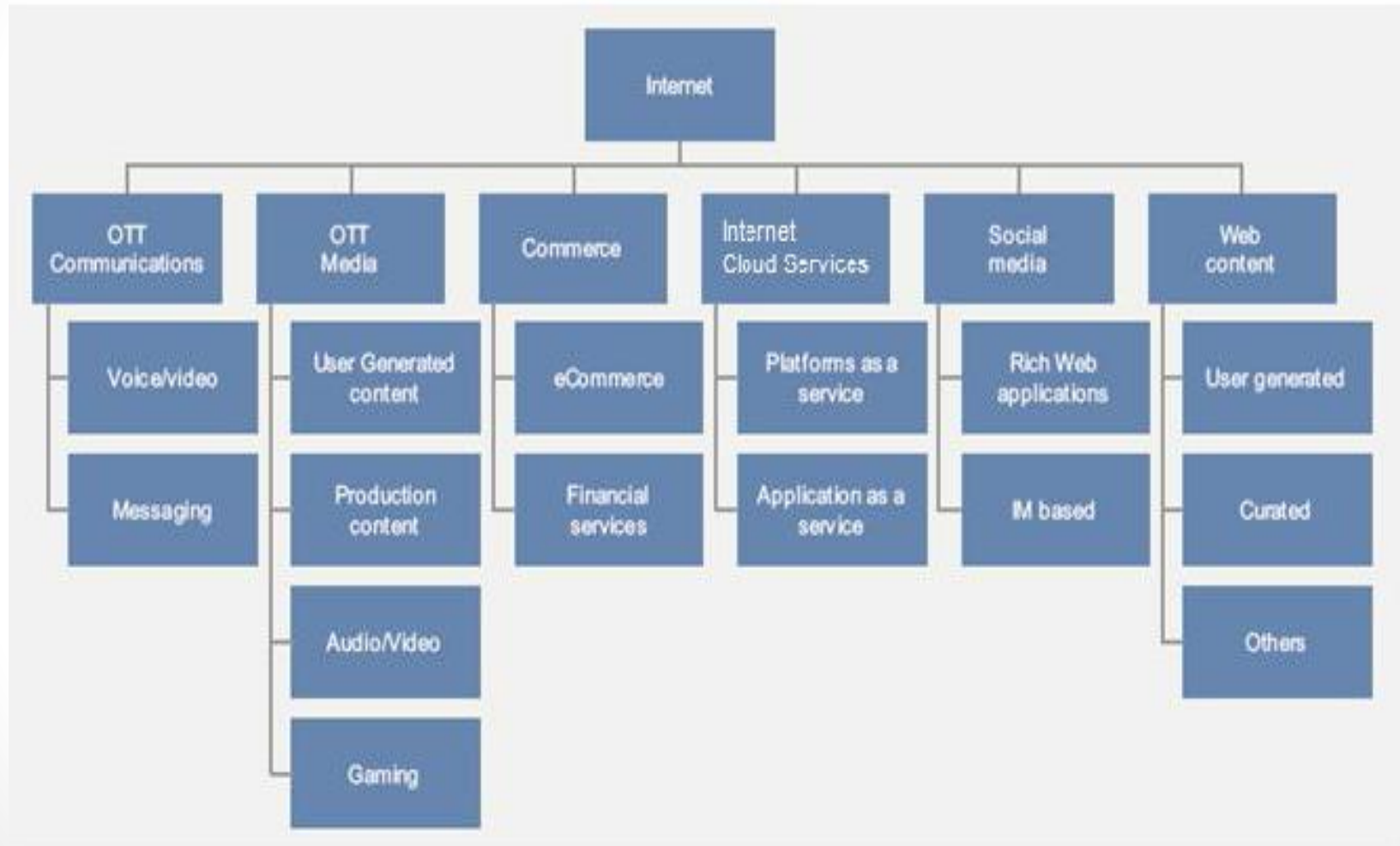
Telco SMS revenues lost to social messaging: 2010–16 (\$m)



- \$52bn revenues are estimated to be “lost” to OTT VoIP globally in 2016
- Over \$40bn SMS revenues lost to OTT social messaging in 2014



Services available on the Internet





Regulatory Imbalances

Area of Regulation	Telecom Service Providers	OTTs
Spectrum allotment and use	Need to bear costs and adhere to rules	No such costs
Licensing	Yes, different licenses and their associated costs including licensing fee	No such licenses or costs
Spectrum related charges	Need to bear the costs	No such costs
Space related charges	Need to bear the costs	No such costs
Bank Guarantees to the government	Yes	No
Proper record keeping including methodology	Required	Required through other acts
Interconnection	Yes, required as part of regulatory regime. Requirement to interconnect entails costs.	No such interconnection required as they are 'Over the Top' networks



Regulatory Imbalances

Area of Regulation	Telecom Service Providers	OTTs
Quality of Service Parameters	Required as part of regulatory regime	No such requirement
Obligations under various Telegraph Acts	Need to adhere to rules	No such requirement
Infrastructure sharing	Need to bear the costs	No Infrastructure sharing
Security conditions	Need to adhere to rules	No such requirement
Emergency and Public utility services	Need to adhere to rules	No such requirement
Monitoring services i.e. Lawful interception and monitoring	Required as a license condition	No such requirement



National Security concerns of OTT players providing communication services

The biggest security threat is from the select off-shore OTT communication service players which are highly capitalized, global monopolies and today control multiple million customers across continents.



Issues related to security, safety and privacy of the consumer

- Cultural sensitivity and diversity as most of the OTT players operate from outside the country
- loss of content privacy & compromised cyber security leading to cybercrimes
- free apps share the personal information with various third party developers
- In constant 'always on' connections, what information is being collected by mobile apps.(Big data)
- Cyber predators, bullies, stalkers are all online waiting to find their next victim. (Child abuse ..)



International Legislations

Singapore

- Specific licenses for VoIP connecting to PSTN

France & Spain

- OTT providers are blocked when offering voice services that connect to the PSTN

UAE

- OTT only allowed if they work with licensed telecom companies

USA

- New FCC draft rules was released on March 12, 2015 (will take few years to be finalized)

KSA

- OTT allowed only to work with licensed telecom companies



Present Status in India

- There has been a rapid proliferation of voice, video and OTT application services being delivered over networks.
- OTT is the future service model for communications and media, and for a whole range of other apps like e-commerce, m-commerce, e-health, e-education, smart grids and the digital economy in general, playing a vital role in Digital India.
- Encouraging India-specific OTTs will augment the supply of apps having localised content in various Indian languages. This will enable home grown OTT services and the services could be located within the country. These services can pave the way for a larger 'Make in India' programme.



Indian Applications

- ❑ The Indian app industry has seen around **9 billion downloads in 2015**. (5X more than 1.56 billion in 2012)
- ❑ **In 2015, the revenue from paid apps** is over **INR 15 billion** against INR 9 billion in 2014,
- ❑ The Indian app market is likely to carry an enormous opportunity for local, as well as regional apps.
- ❑ India's app economy is already growing multifold with each passing quarter, and the country's 3 lakh app developers' community is likely to expand drastically.
- ❑ By 2017, India is estimated to have the largest developer base.
- ❑ 4G is going all the way to accelerate the pace of mobile application development in the country.



Government formed committee on Net neutrality including OTT

The committee recommended (May 2015) the following :

- (i) OTT application services have been traditionally available in the market for some time and such services enhance consumer welfare and increase productivity. Therefore, such services should be actively encouraged and any impediments in expansion and growth of OTT application services should be removed.*

- (ii) Specific OTT communication services dealing with messaging should not be interfered with through regulatory instruments.*



Government formed committee on Net neutrality including OTT

(iii) In case of VoIP OTT communication services, there exists a regulatory arbitrage wherein such services also bypass the existing licensing and regulatory regime creating a non-level playing field between TSPs and OTT providers both competing for the same service provision. Public policy response requires that regulatory arbitrage does not dictate winners and losers in a competitive market for service provision.

(iv) The existence of a pricing arbitrage in VoIP OTT communication services requires a graduated and calibrated public policy response. In case of OTT VoIP international calling services, a liberal approach may be adopted. However, in case of domestic calls (local and national), communication services by TSPs and OTT communication services may be treated similarly from a regulatory angle for the present. The nature of regulatory similarity, the calibration of regulatory response and its phasing can be appropriately determined after public consultations and TRAI's recommendations to this effect.



Consultation papers issued by TRAI

- TRAI has issued consultation paper on Regulatory Framework for Over-the-top (OTT) services on 27th March, 2015;
- TRAI has issued pre-consultation paper on 30.05.2016 on net neutrality which also investigate the relation ship between TSP and OTT content providers;
- TRAI recently also issued Consultation on 'Internet telephony' on 22.06.16;



Important issues in CP

- Policy and regulatory environment and need for regulation
- Security concerns of OTT players providing communication services
- Issues related to security ,safety and privacy of the consumer
- Issues arising because of net neutrality
- Network discrimination and traffic management practices

Thanks