

# **ITU-ASEAN Forum on Over the Top (OTT) Services: Business, Policy and Regulatory Trends**

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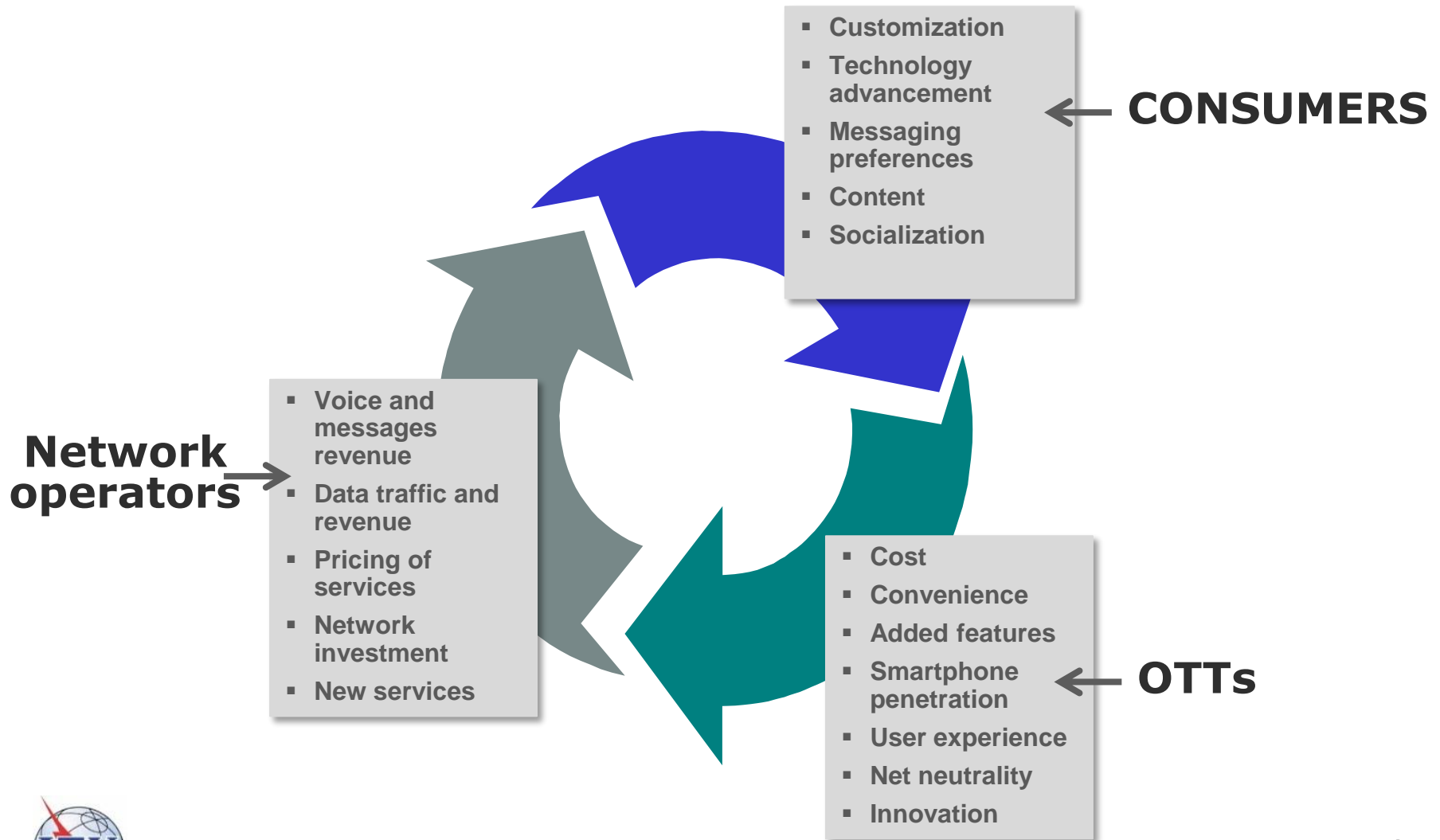
# **Session 2: Drivers of OTT and implications for telecommunications operators**



# Agenda

- What are the trends affecting telecom consumers behavior with regards to communication services due to advent of OTT services
- What are the adoption drivers of OTT services
- The OTT business models
- Analyze the impact of these factors on telecom operators sustainability

# Various factor and trends have a huge impact on network operators current business model



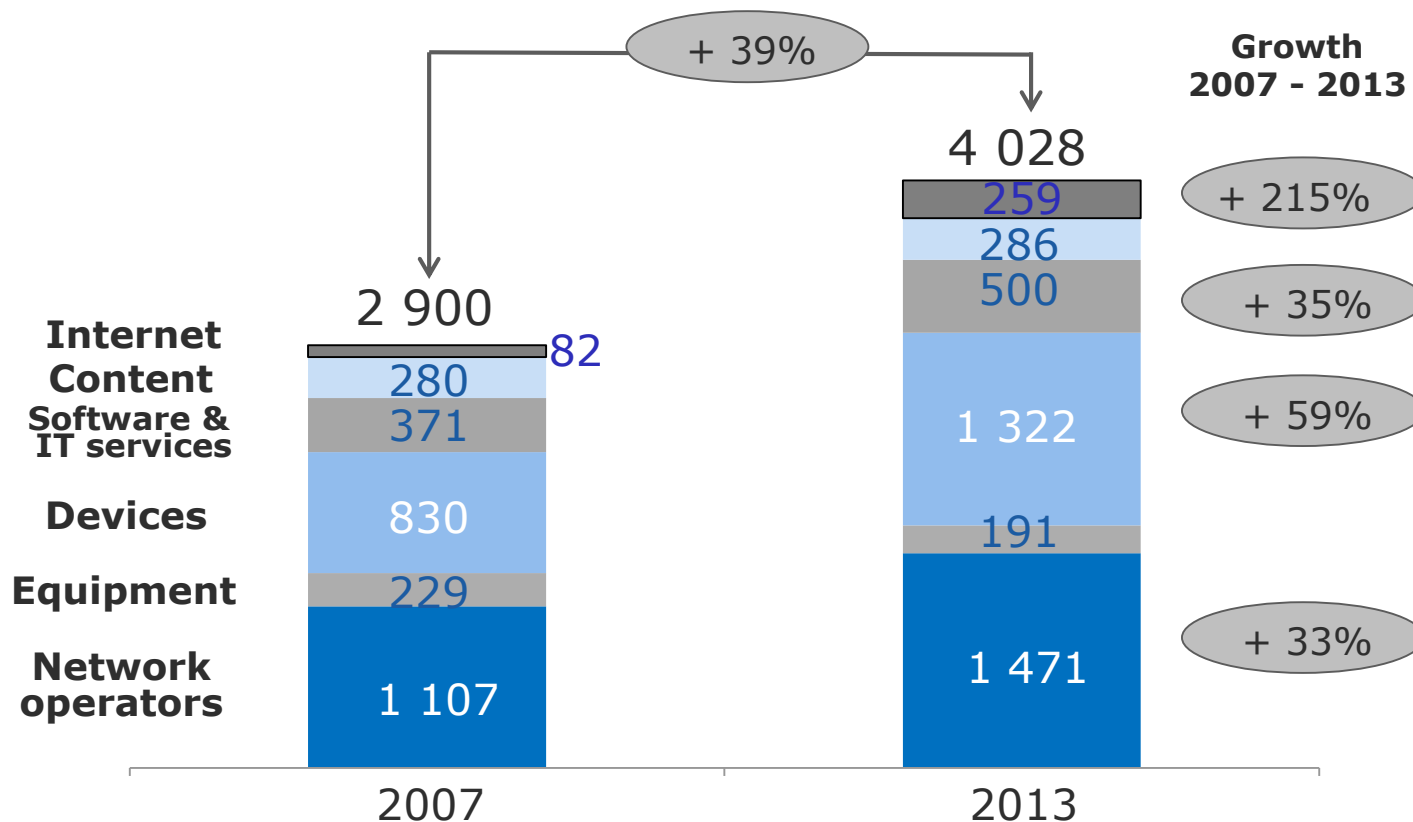
# Factors pushing messaging to OTT alternatives

- The key drivers that tip a market towards OTT:
  - Technology readiness—3G+ networks and high penetration of smartphones foster wide distribution of OTT apps
  - Cost incentives—high prices of SMS encourage a switch to the cheaper (even free) OTT applications
  - Network effects—in particular youth aged 13–24 years tend to be the leading indicators of a more widespread uptake
  - The strength of the OTT alternative—markets with high penetration of a single OTT app, or where a single OS platform is highly concentrated, are at the greatest risk
    - e.g. KakaoTalk has 100% presence on smartphones in Korea (40m users)



# In general all segments of the digital ecosystem have shown considerable growth

Revenues\* of the digital ecosystem by segment  
(billion dollars)

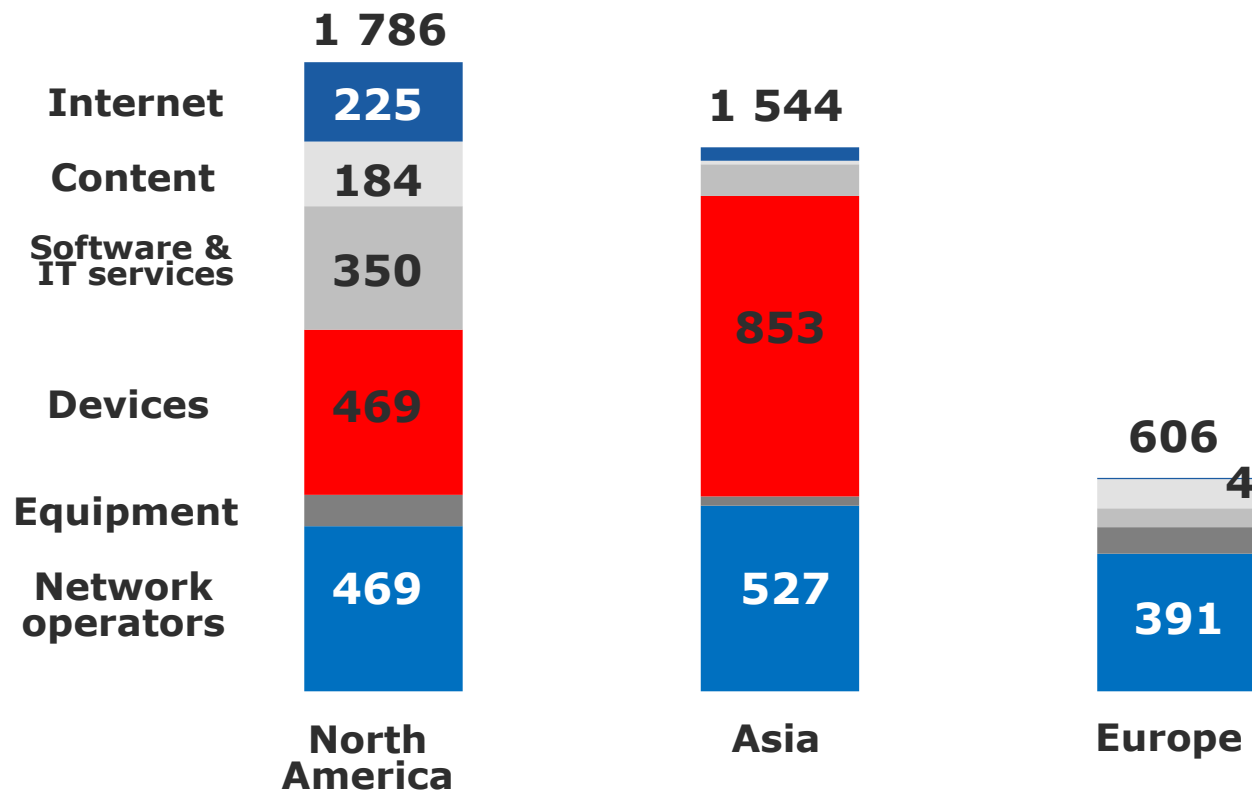


\* Top 30 companies revenues

Source: Adapted from ADLittle, The Belgian Telecom Landscape Study, based on Thomson Reuters data.



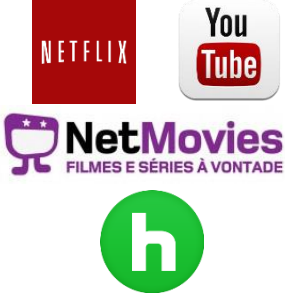
# Overall its striking the low diversification across sectors observed in Europe

Turnover\* of top players by region and for each segment  
(billion dollars)



\* Top 30 companies revenues, geographic breakdown according to headquarters location  
Source: Adapted from ADLittle, The Belgian Telecom Landscape Study, based on Thomson Reuters data.

# OTTs have implemented different business models with variable impact on network operators

<p>Communications</p>	<ul style="list-style-type: none"> <li>■ Voice services</li> <li>■ Messaging</li> </ul>		<p>Fixed and Mobile telephony substitute; SMS substitute</p>
<p>Applications</p>	<ul style="list-style-type: none"> <li>■ Social networks</li> <li>■ E-commerce</li> </ul>		<p>Alternative way of communications</p>
<p>Video/audio</p>	<ul style="list-style-type: none"> <li>■ OTT-TV</li> <li>■ OTT Video</li> <li>■ Streaming and VoD</li> </ul>		<p>A TV substitute</p>



# **OTTs significantly impact telecoms business models which have been based on overly priced voice and sms services**

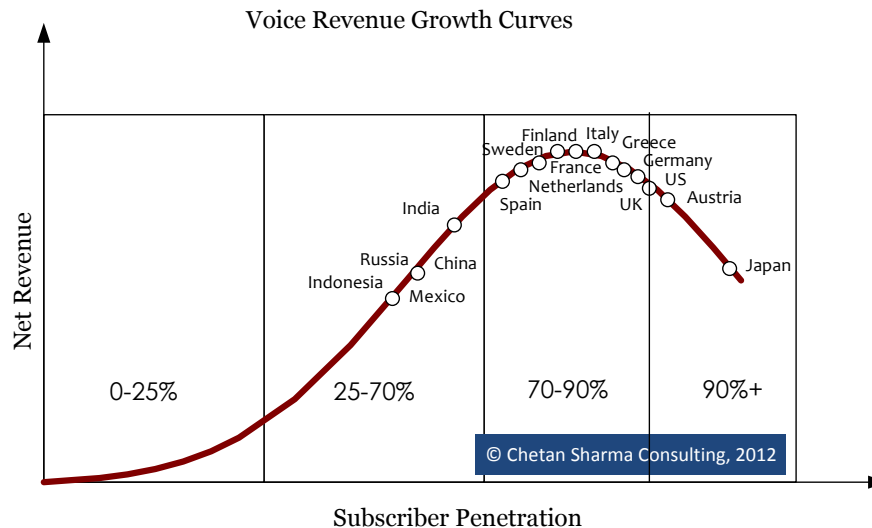
- Revenue loss: voice and messages
- Revenue enhancement: data, handsets, new services
- IP traffic increased demand will require additional investment in network bandwidth
- Sector consolidation (within mobile; mobile and cable; fixed and mobile)
- Bundled offers

# Implications will be different for fixed and mobile operators at least in the short run

	Fixed	Mobile
Revenue losses	<ul style="list-style-type: none"> <li>• Voice</li> <li>• SMS</li> </ul>	<ul style="list-style-type: none"> <li>• VOIP with LTE</li> <li>• SMS</li> </ul>
Revenue increase	<ul style="list-style-type: none"> <li>• Content exclusivity</li> <li>• Flat rate expected by consumers</li> </ul>	<ul style="list-style-type: none"> <li>• Higher Data traffic growth</li> <li>• Handsets sale</li> <li>• Pricing flexibility</li> </ul>
M&A activity	<ul style="list-style-type: none"> <li>• More limited</li> </ul>	<ul style="list-style-type: none"> <li>• Needed to get scale and offer multiple play</li> </ul>
Network Investment	<ul style="list-style-type: none"> <li>• IP networks investment driven by high cost of civil works</li> </ul>	<ul style="list-style-type: none"> <li>• Less significant compared to fixed</li> </ul>

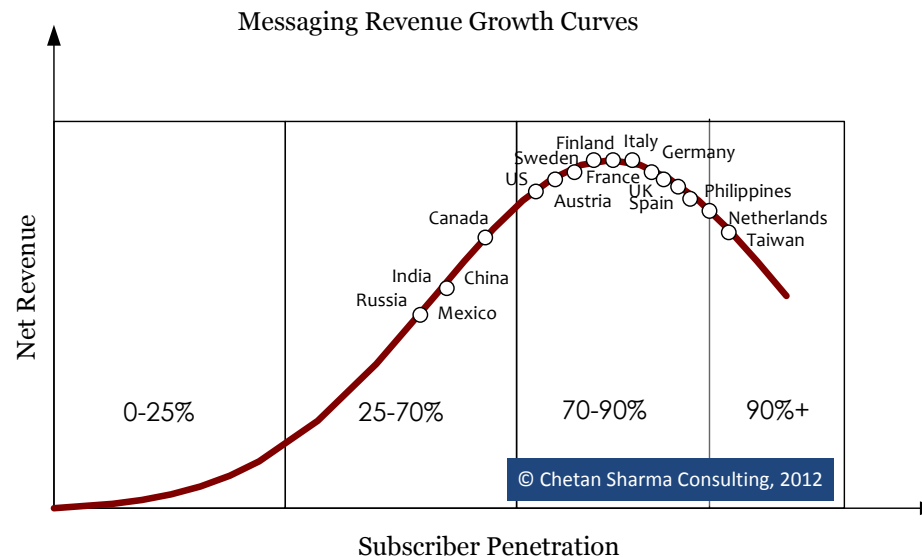
# Mobile voice revenues

- Mobile voice revenues have peaked in many developed markets and are now in decline
  - Developing markets are still on the rise but they too will soon peak
- Mobile VOIP making inroads but hampered by:
  - need for widespread indoor wireless broadband
  - lack of interoperable apps
  - Smartphone battery life



# Mobile messaging

- Mobile messaging revenues have also either peaked or are peaking
- The battle against OTT messaging has effectively been lost!
  - Instant messaging, social networks, P2P messaging
  - It was good while it lasted—and now the high margins will be difficult to replace



# According to several analysts estimated revenue losses are very significant

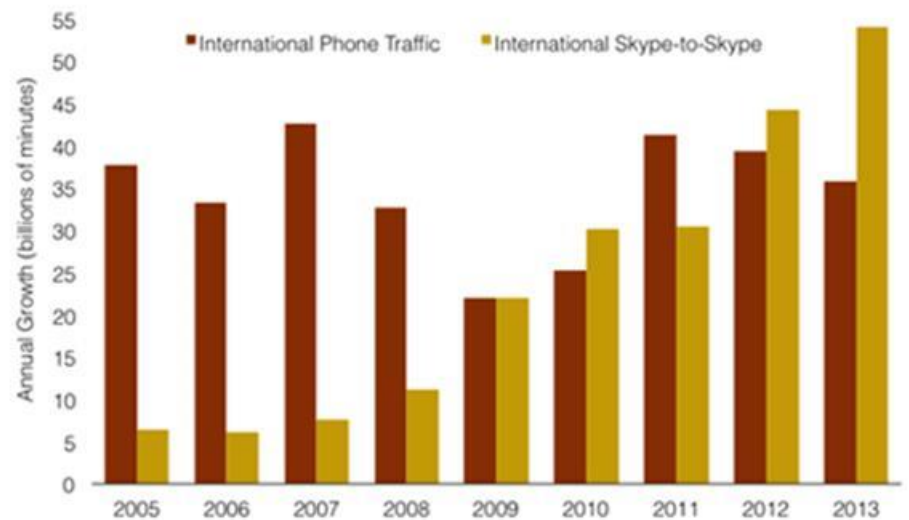
- The volume of OTT messages sent is already estimated to exceed standard SMS messages and forecasts are unambiguously in favour of OTTs
- According to Ovum, a London-based research and analytics firm, the telecommunications industry will lose a combined \$386 billion between 2012 and 2018, mainly from customers using over-the-top (OTT) voice applications such as the market-leading Skype and Lync, both owned by Microsoft



# The volume of international telephone traffic remains larger than Skype traffic, but Skype's international minutes are growing much faster

- Skype on-net international traffic estimated growth was 35 billion minutes in 2014, to reach a total 248 billion minutes
- OVUM estimated \$52bn revenues lost to OTT VoIP globally in 2016, and it goes up to \$71bn (or 9% of total voice revenues) before 2020
- Mobile voice substitution by VoIP will accelerate after introduction of IP-based LTE network (VOLTE)

Increase in International Phone and Skype Traffic



Source: TeleGeography

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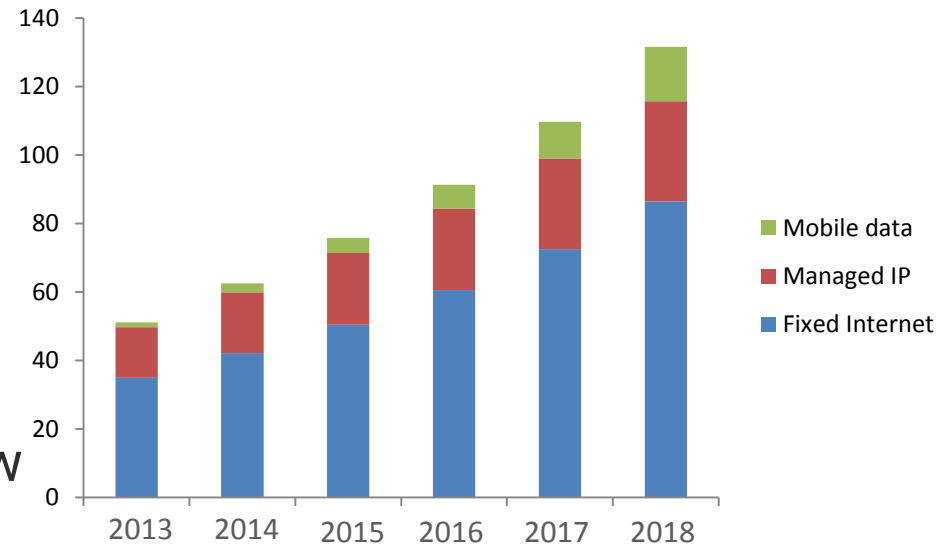
Source: Telegeography



# IP traffic increased demand will require additional investment in bandwidth

- According to Cisco's forecast, global IP traffic will nearly triple by 2018, to reach 131.6 exabytes/month
- Consumer IP traffic will reach 108 exabytes/month and business IP traffic will surpass 23.6 exabytes per month
- Mobile data is estimated to grow at a CAGR of 61% in this time frame

Global IP Traffic 2013 – 2018  
(Exabyte/month)



Source: Cisco Visual Networking Index: Forecast and Methodology, 2013–2018

*Telecom operators pushed to finance the necessary additional investment in network upgrading and spectrum*

# The search for scale and scope, cost reduction and market power is driving sector consolidation

- Significant part of the revenues continues to decline due to consumer welfare regulation and increasing competition from global players, such as Google, Skype and WhatsApp, offering alternative services in the edge of the networks
- How many competitors are necessary for satisfactory outcomes? Are 3 enough?

## Recent M&A Activity in the EU

Mobile - Mobile	Comments
H3G At/Orange At (2012)	4 to 3 Mobile operators in Austria
H3G/Telefónica IE (2014)	4 to 3 Mobile operators in Ireland
Telefónica DE/E-Plus (2014)	4 to 3 Mobile operators in Germany
Cable - Mobile	
Zon/Optimus (2013)	Merger, Portugal
Vodafone/Kabel Deutschland (2013)	Vodafone acquisition of Kabel, Germany
SFR - Numericable (2014)	Merger, France (owner Altice)
Fixed - Mobile	
Vodafone/Ono (2014)	Vodafone acquisition of Ono, Spain

Source: Incyte Consulting analysis and "Mobile Licenses How Many to Grant", Incyte Consulting, available at: <http://www.incyteconsulting.com/>



# Conclusions

- There is no doubt that OTTs had and will continue to have a strong impact on telecommunications traditional revenues: voice and messaging
- In the fixed domain the battle with OTTs is more difficult: users got used to unlimited or quasi unlimited volume caps, to no blocking or throttling, free open internet access, and unlimited capacity of fiber in consumer's perception
- In the mobile service consumers are acquainted with very restrictive volume caps (in most markets), and in general the perception is that mobile broadband is expensive
- Mobile data traffic will see exponential growth byt mobile business has a lot more pricing flexibility and capacity to control traffic load
- Sector consolidation will continue also driven by lower business margins and further need for scale



**Or-koon  
Thank you**

