

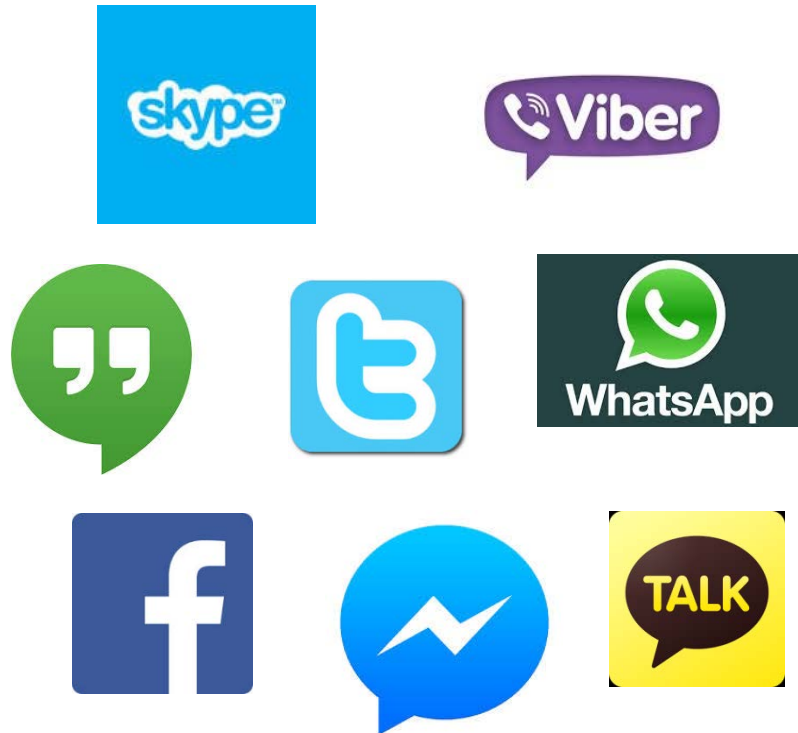


Roaming Costs : how to create a new virtuous circle

2014-05-26

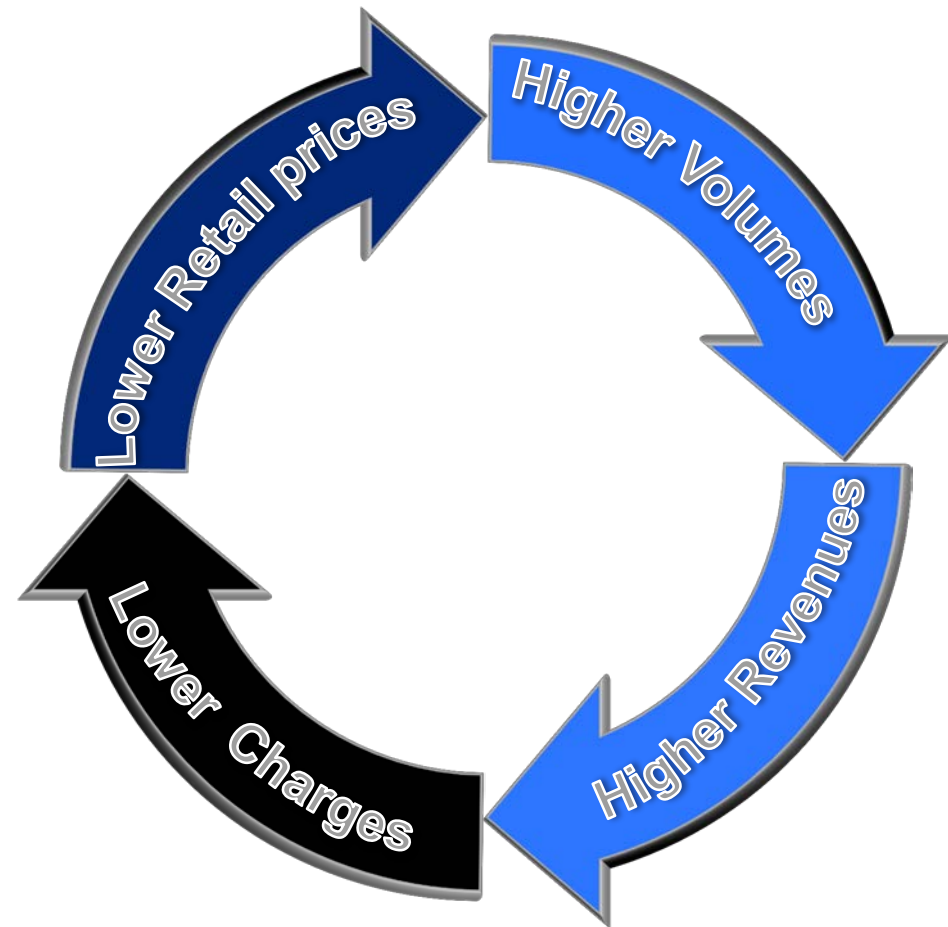
Pascal Mayeux

ROAMING: TOWARDS A NEW DEAL?



- Roaming is expensive
- Users don't communicate or communicate 10 times less than usual.
- OTT applications with WiFi connexion will win the race
- Unless...

- Roaming **MUST BE TIME LIMITED**
 - To avoid cannibalism and allow profit for Visited MNO
 - To allow profitable roaming services for Home MNO
 - While answering customers needs during their holidays or business trips



Impact of the new virtuous circle

Customers pay roaming prices in addition to domestic prices

x10

Roaming services included in domestic monthly fees

2013
Traffic

2013
Traffic

2013
Traffic

2013
Traffic

2013
Traffic

2013
Traffic

2013
Traffic

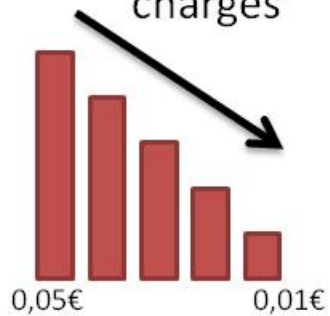
2013
Traffic

2013
Traffic

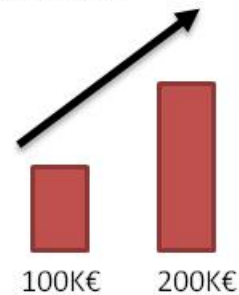
2013
Traffic

2013
Traffic

Wholesale charges










Wholesale Revenues



But because of traffic growth

**COST MODEL:
THINK DIFFERENT**

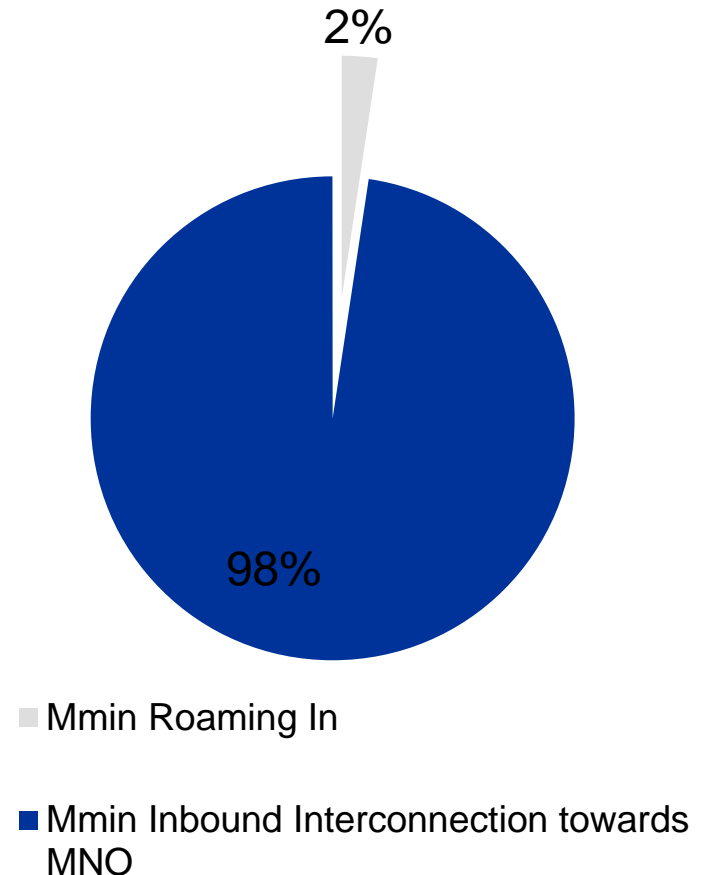
Roaming Traffic impact on cost

Costs	Roaming traffic impact on cost	
Radio Network	Very Low	
Core Network	Low	
Data Clearing House (DCH)	Low	
GRX (data) transit	High	
SS7 (signalling) transit	Low	
Voice transit	Moderate	
Voice Termination Fees	High	

- **Roaming traffic is a very small part of a MNO network traffic.**
- **In France, it is about 2% of Inbound interconnection traffic.**
- **Voice and SMS Termination Fees includes radio and core network costs and are usually « cost indexed »**

France Q2 2012-Q2 2013

source: ARCEP



- **Voice roaming costs shall be around**

Visited Termination Fee + International Transit + Destination Termination Fee

- **If Visited Termination Fee is regulated and directly related to costs**

- **Roaming SMS (MO) costs shall be around**

Visited SMS Termination Fee

- Data cost should be around
Visited Voice Termination Fee + GRX costs

■ Assumption:

→ Voice bandwidth (codec + IP overhead) =
100Kbits/s = 0,1Mbits/s

■ Calculation:

Cost per MB =
Termination Fee * 8
bits

Voice Bandwidth * 60s

CONCLUSION

- **Roaming Costs are not as expensive as we may think, especially if time limited to reduce risks.**
- **New Business Model can be deployed, based on less costs and higher volumes**
- **Target costs shall be close to Termination Fees**
- **If nothing is done, roaming will die and OTT through local 3G or Wi-Fi connexion will win.**