



# Business Models in Mobile TV



*Paris Tech Telecom – December 18, 2009*

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# Agenda

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- **Mobile TV facts & figures**
- **Mobile Traffic : The Broadcast / Unicast alternative**
- **Mobile TV Business Models : an inventory**
- **Stakeholders analysis**
- **Regulation**
- **What shapes the market ?**
- **Concluding remarks**

# Mobile TV : Facts & Figures

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## General

- Visible customer appetite
- Fully developed and satisfactory technologies
- A “natural” evolution and merger of two strong market trends : TV + Mobile

## EUROPE

- Ca 5m subscribers, mostly 3G based
- One of the early / popular 3G usage drivers
- Impact of the iPhone
- DVBH in a limbo
- From 3% to 6% penetration in France over 2009

## US

- Ca 10m subscribers, mostly 3G based
- Mobile TV (3G) 7m subs ( 4 month for the last m)
- The strategic push of a wireless powerhouse : Qualcomm / Flo TV
- 3mns on 3G / 30mns on broadcast

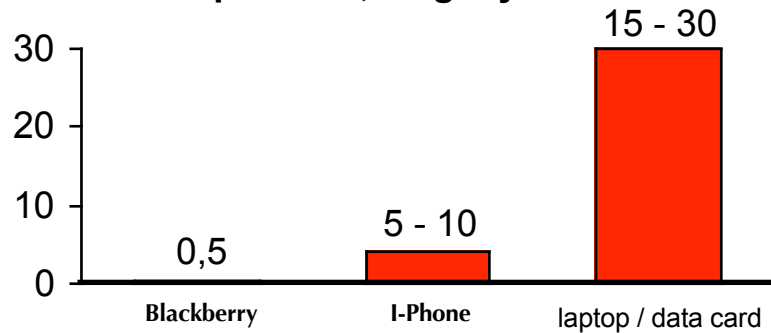
## ASIA

- 60m subs in Japan / 30m subs in Korea
- Broadcast dominance... but not necessarily the future
- Emergence in China with CMMB ( Broadcast)

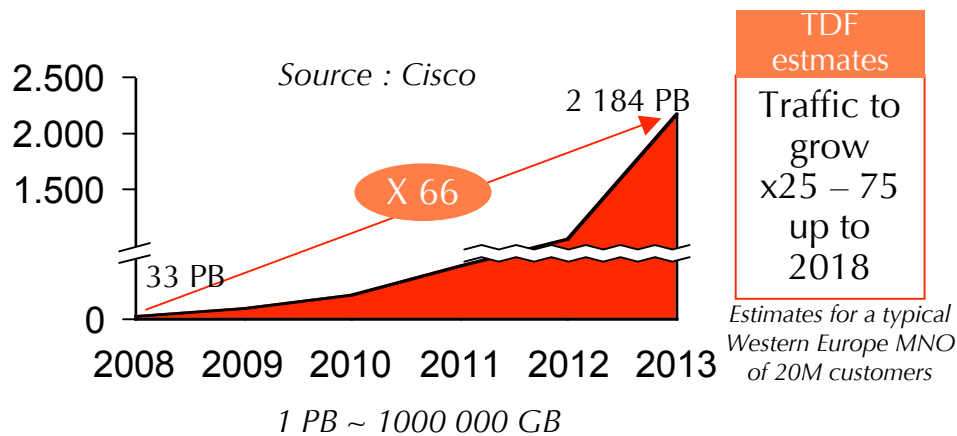
# Mobile TV and Traffic growth for wireless data networks

## Growth drivers for data traffic

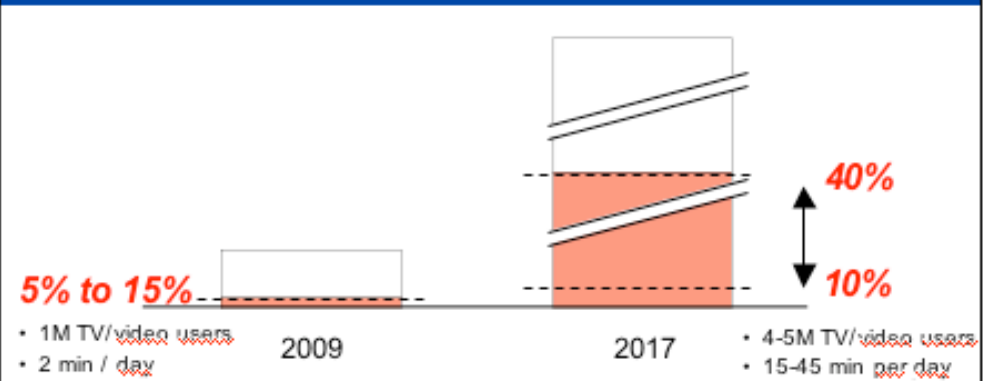
Typical daily data usage Western Europe 2008, Megabytes/user



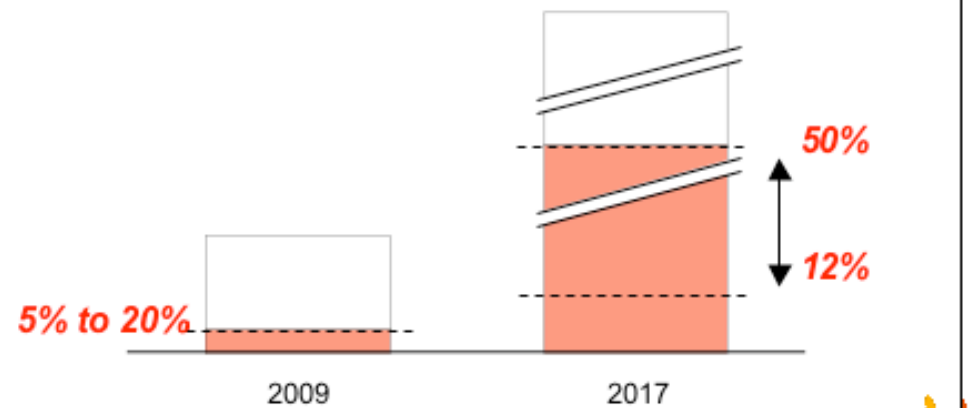
## Huge growth of traffic ahead



## Share of Video / TV in network load



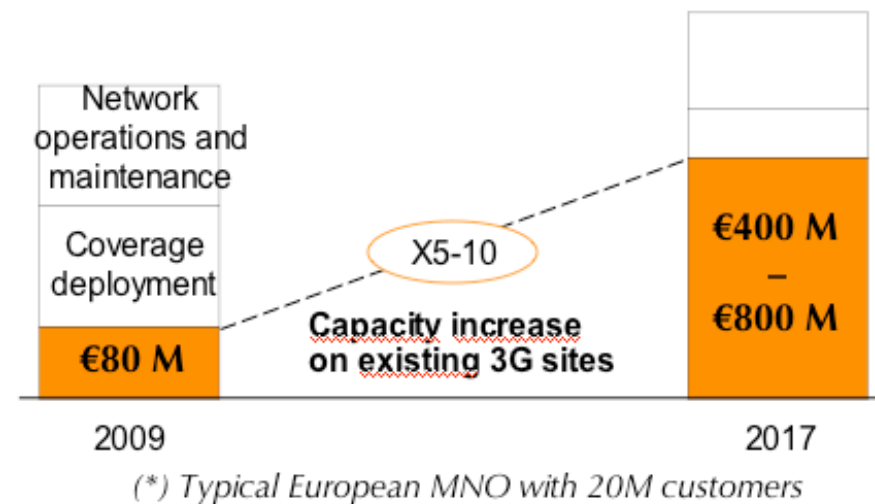
## Share of TV / Video at busy hour



## .... Which will cause huge growth in network costs

- Installed capacity per site in the densest areas to grow from 0,7Mbit/s / cell to 50 Mbit/s
- Different technological cellular options to increase capacity exist
  - HSPA upgrades, unused carrier, new spectrum acquisition, LTE...)
- Significant progress in cost / Mbps expected
- But nevertheless significant investments expected:
  - x5 – x10 on current spending level on capacity build up

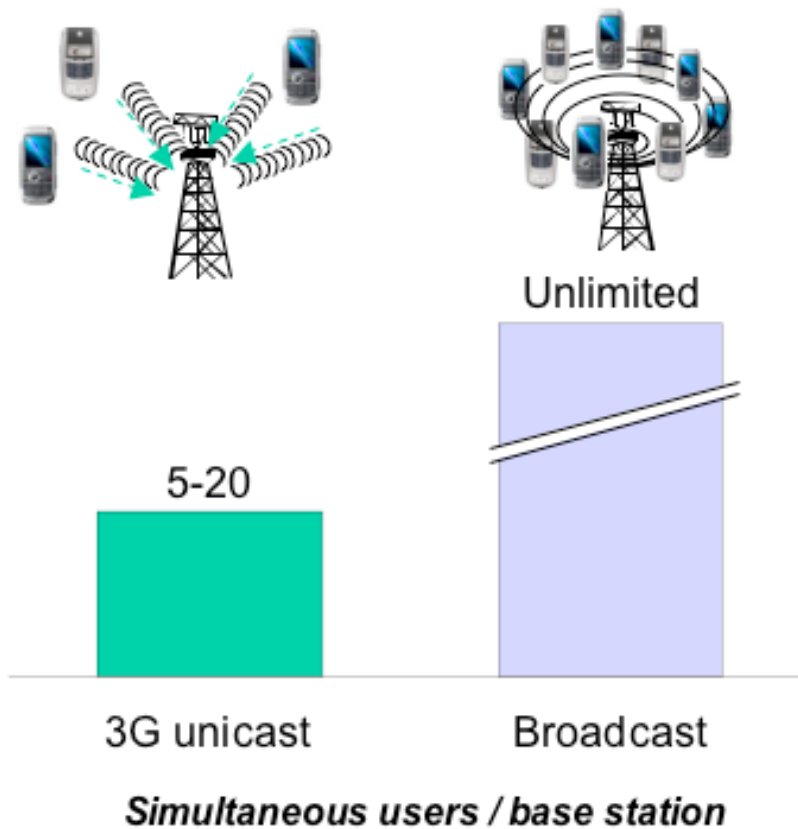
### Estimated annual cost of network capacity upgrade for a MNO\* without any budget constraints



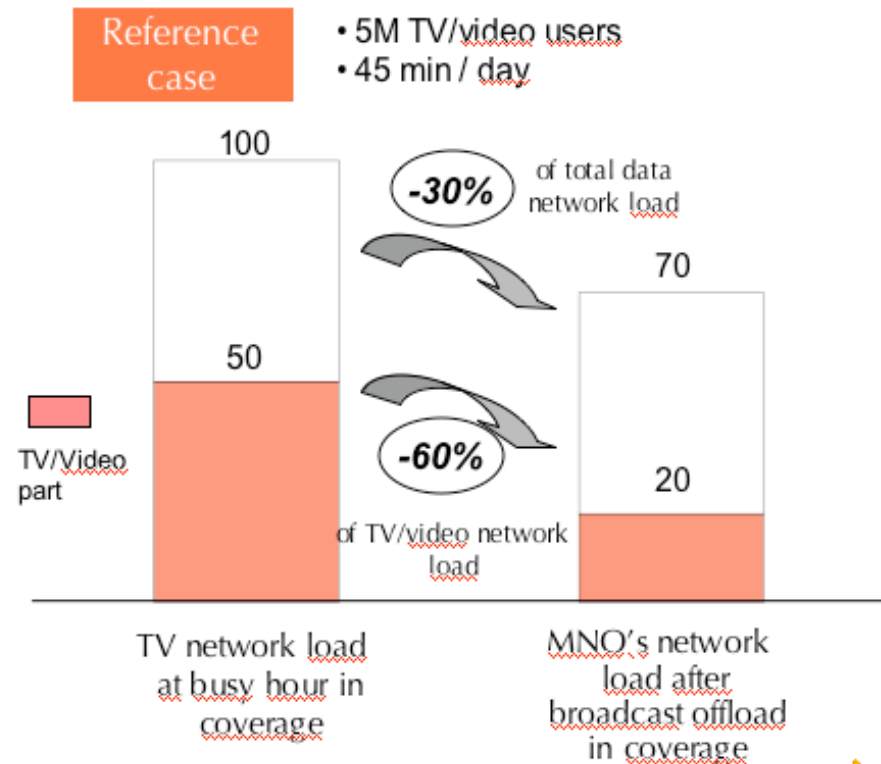
€2-4 Bn of aggregated incremental network capacity costs could be spent over the period (capex+ opex)

# Broadcast vs Unicast (1)

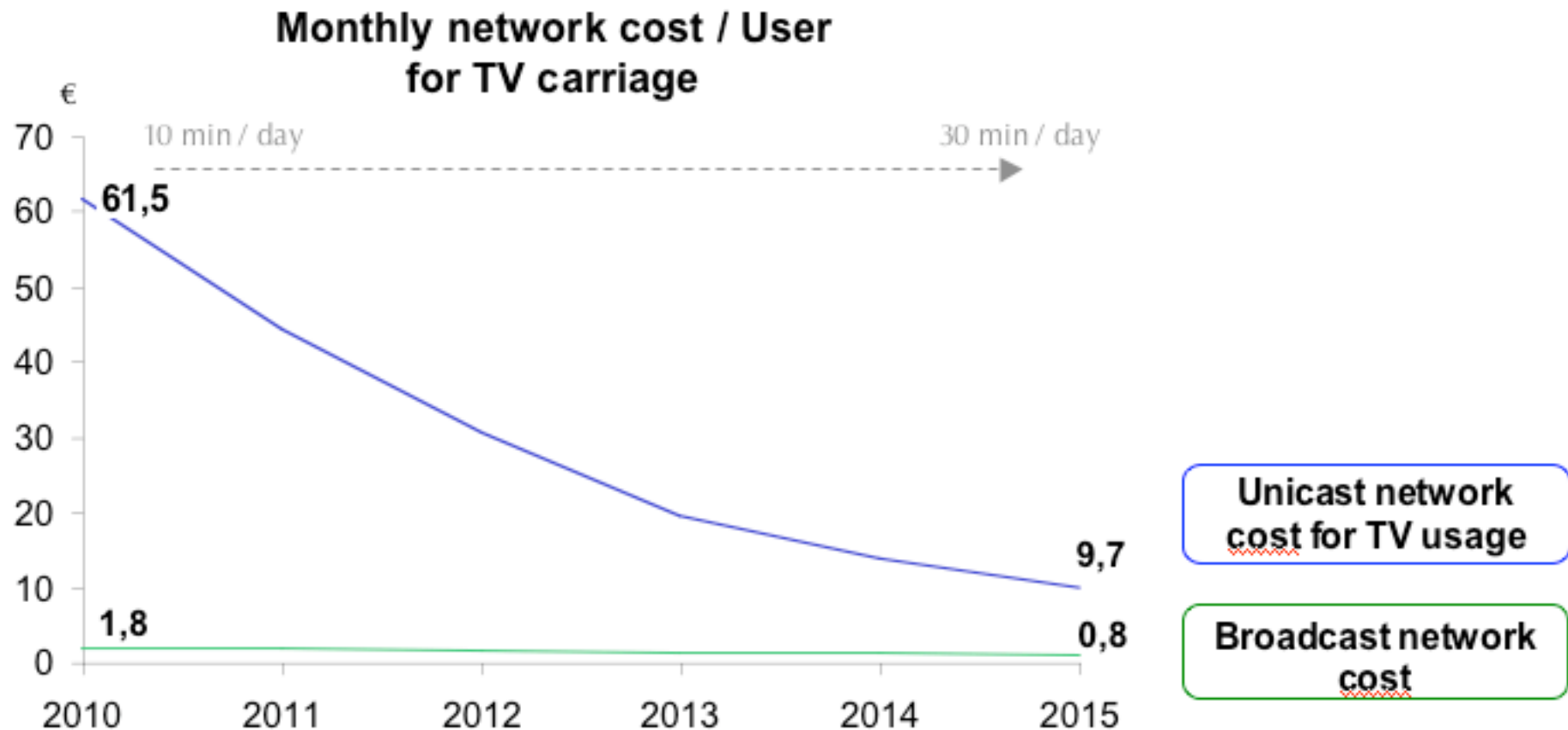
**Broadcast – unicast : comparison of number of simultaneous users per cell**



**Part of cellular mobile TV traffic offloaded on a broadcast network in coverage (17%, basis 100)**

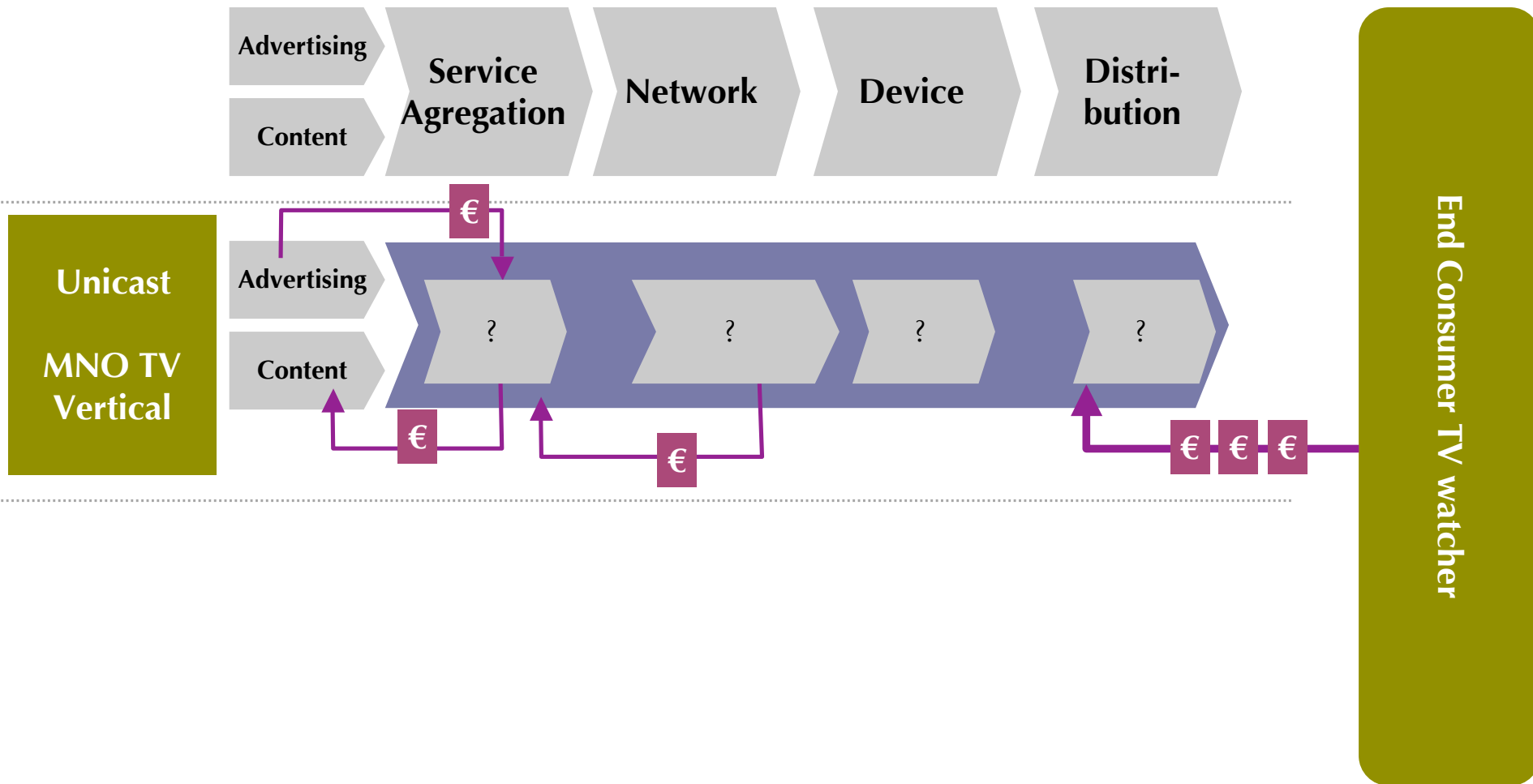


## Broadcast vs Unicast (2)






Source :TDF estimations, hypothetical European MNO of 20 M customers

# Mobile TV Business Models : key variables



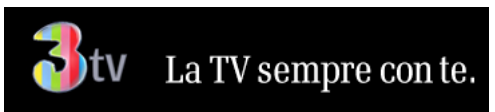









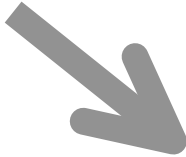

# Business Models in Mobile TV (1)

Unicast	MNO Vertical	<ul style="list-style-type: none"> <li>3G network</li> <li>Mobile operator as sponsor / distributor</li> <li>TV gets Rev share</li> </ul>	
	3d Pty Offer on 3G	<ul style="list-style-type: none"> <li>3G network</li> <li>Paid subscription to 3d party</li> <li>Rev share 3dpty to MNO and to TVs</li> </ul>	
	TV Direct	<ul style="list-style-type: none"> <li>TV app on iPhone</li> <li>3G network (unpaid) + wifi</li> </ul>	

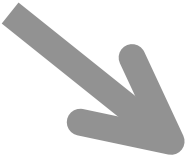



# Business Models in Mobile TV (2)

<b>Broadcast</b>	<b>Broadcast MNO Vertical</b>	<ul style="list-style-type: none"> <li>Mobile operator owns operate network</li> <li>Mobile operator as sponsor / distributor</li> <li>TV remuneration : variable</li> </ul>	 
	<b>TV Sponsored</b>	<ul style="list-style-type: none"> <li>TVs pay / run the network and programming</li> <li>Free to Air</li> <li>Interface is industry standard ==&gt; available on all phones for free</li> </ul>	  
	<b>Shared Network</b>	<ul style="list-style-type: none"> <li>Neutral 3d party operates network</li> <li>Wholesale offer to MNOs</li> <li>No end user visibility</li> </ul>	
	<b>Dedicated Service Provider</b>	<ul style="list-style-type: none"> <li>Dedicated network and service package</li> <li>Branding, distribution</li> </ul>	

# An interim status of business models (1)

Unicast	MNO Vertical	<ul style="list-style-type: none"><li>Highly visible launches ... and slowing dynamics</li><li>A double sided situation for MNOs ... which makes them quite shy in the end</li><li>Are the MNOs controlling the market growth ?</li></ul>	
	3d Pty Offer on 3G	<ul style="list-style-type: none"><li>Not very developed</li><li>MNO not willing to host such network hungry services</li><li>Is there enough value to be shared ?</li></ul>	
	TV Direct	<ul style="list-style-type: none"><li>Enabled by the new platforms iPhone type</li><li>The retaliation (attempt ?) of TV channels anxious of abusive disintermediation</li><li>Will MNOs let it go on ? Traffic control measures</li><li>Finally a TV has customers and CRM ?</li></ul>	

## An interim status of business models (2)

Broadcast	<b>Broadcast MNO Vertical</b>	<ul style="list-style-type: none"><li>■ One MNO not sufficient to create a market</li><li>■ Potential regulatory obligations ( forced open access / wholesale offers )</li><li>■ Frequency limitations</li></ul>	
	<b>Shared Broadcast Network</b>	<ul style="list-style-type: none"><li>■ The “obvious” good idea ; regulatory OK, savings, ..</li><li>■ ... that is not emerging so quickly</li><li>■ Not Invented here syndrome</li><li>■ MNOs not so used to cooperative initiatives</li><li>■ Potential Trojan horse of non MNO providers in mobile TV</li></ul>	
	<b>TV Sponsored</b>	<ul style="list-style-type: none"><li>■ Japan and Korea broadcasters gets tired of paying network with little benefits</li><li>■ Seems that the traditional Free to air model does not apply in mobile</li></ul>	
	<b>Dedicated Service Provider</b>	<ul style="list-style-type: none"><li>■ Fills a gap : Mobile TV needs a committed and incentivized market maker</li><li>■ Straight strategy and intention to make mobile TV happen</li></ul>	

# The MNO hesitation with Mobile TV

	Loves it because ...	Fears it because
Unicast	<ul style="list-style-type: none"><li>■ 3G penetration driver</li><li>■ Marketing anchor topic</li><li>■ ARPU growth / protection</li><li>■ Dominance in delivery of content &amp; digital entertainment</li><li>■ Pre-empt product to avoid disintermediation (TV players)</li></ul>	<ul style="list-style-type: none"><li>■ Traffic/network nightmare</li><li>■ Value destruction ; low yield of Mbyte</li></ul>
Broadcast	<ul style="list-style-type: none"><li>■ Cost x 1/10</li><li>■ Quality</li><li>■ The solution for mass marketing and distribution</li></ul>	<ul style="list-style-type: none"><li>■ Not invented here</li><li>■ No control of network</li><li>■ A trojan horse to disintermediation ; a non MNO service provider can deliver on « my » platform</li><li>■ A new handset issue</li></ul>

# The key issues for the stakeholders

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## TVs

- Would like / MUST exist on mobile
- Free to Air model where TV pay network does not play; advertising revenues are years ahead
- Forced intermediation by MNO is not a satisfactory option
- Paid streaming not a long term solution
- TVs are not in a position to influence devices

## Device Makers

- Plenty of technology
- What do the client = MNO need / want ?
- Cf FM

## Regulation aspects

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- Telecom & Media regulations
- Frequency assignment
- Technical standard ( from indicative to assertive)
- Competition between platforms
- Handset control = dominant position ; will it be abused ?
- Competitors co-operating in shared platforms ; is it acceptable ?
- Cultural diversity / content regulation in media

# Who is shaping the business model ?

## Top Down Government Policies

- ASIAN Model (China, Japan, Korea)
- Will it reach its goal of global push to national technology ?

## Hybrid & Uncertain

- Europe
- Top Down = "preferred" technology (DVBH)
- Reserved Free frequencies
- No mandatory measure
- Fragmented market ==> diverse strategies and initiatives

## Business Initiatives

- US
- Sponsors put significant capital at risk to establish a new business
- Set their own rules
- Auction of frequencies

Clarity  
Momentum - Volumes  
Things happen  
Opportunity gets created

Compliance with Free market /  
technology neutrality  
principles  
Listen to the customer / market

Clarity  
Momentum  
Things happen  
Opportunity gets created

Risk to go against the market  
Value destruction

Slow development  
Under-competition  
Network saturation services  
scarcity

Business risk of (significant)  
value destruction  
  
Over-competition



## Concluding remarks

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- A new market is emerging « for sure »
- Create opportunities and threats for the stakeholders
- Strong stakes
- TV = exist in the mobile life of the customer ; avoid forced intermediation and « raw material »
- MNOs = avoid dumb pipe; maintain yield; protect customer base
- Many diverse business models : still uncertain
- Significant Regulation issues, competition and sectorial
- Strong cultural differences on how the market gets its direction and structure....
- Let us see what happens.....