

Digital Television in the Environment of Convergence

Enzo Savarese
AGCOM
Commissioner

**EETT's 4th International
Conference on Broadband
Athens, 20-21 May 2009**

From analogic to Digital TV

Digital technology introduce progressive diffusion of digital television making an epocal transition process



- *started in '90th with satellite Tv,*
- *today is about DTT with switch-off untill 2012.*

Digital Tv: from passive to active user

Typical *passive user* of analogical Tv,
today became an *active "USER"*
thanks to interactivity and VAS.

- *DVB – S* (satellite)
- *DVB – C* (cable)
- *DVB – T* (terrestrial)
- *DVB – H* (mobile)
- *DVB – IP* (Ip Tv)
- *P2P* (Web Tv)



Digital passage happens using
DVB standard family...

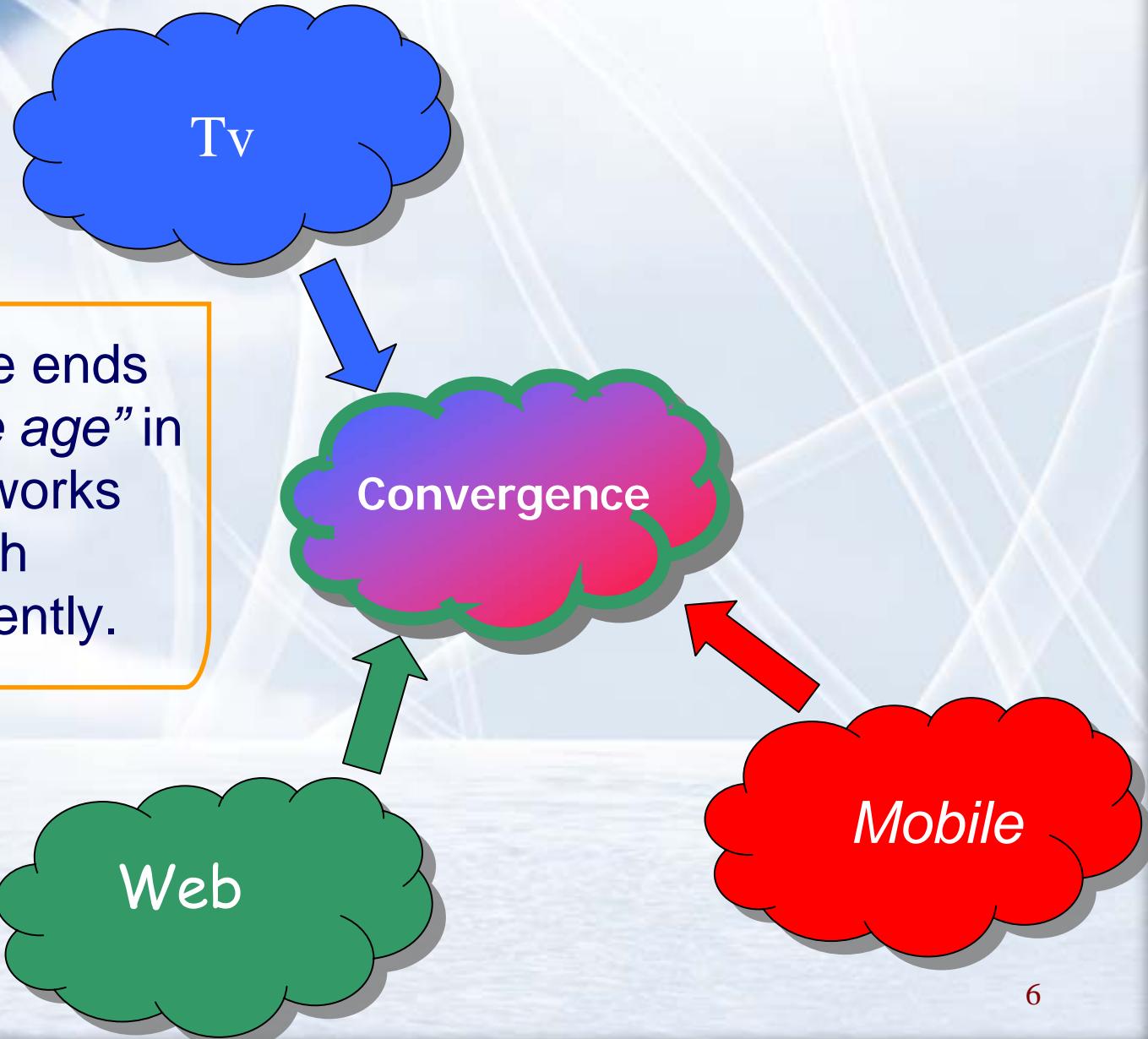
and others...



Broadcasting systems by country

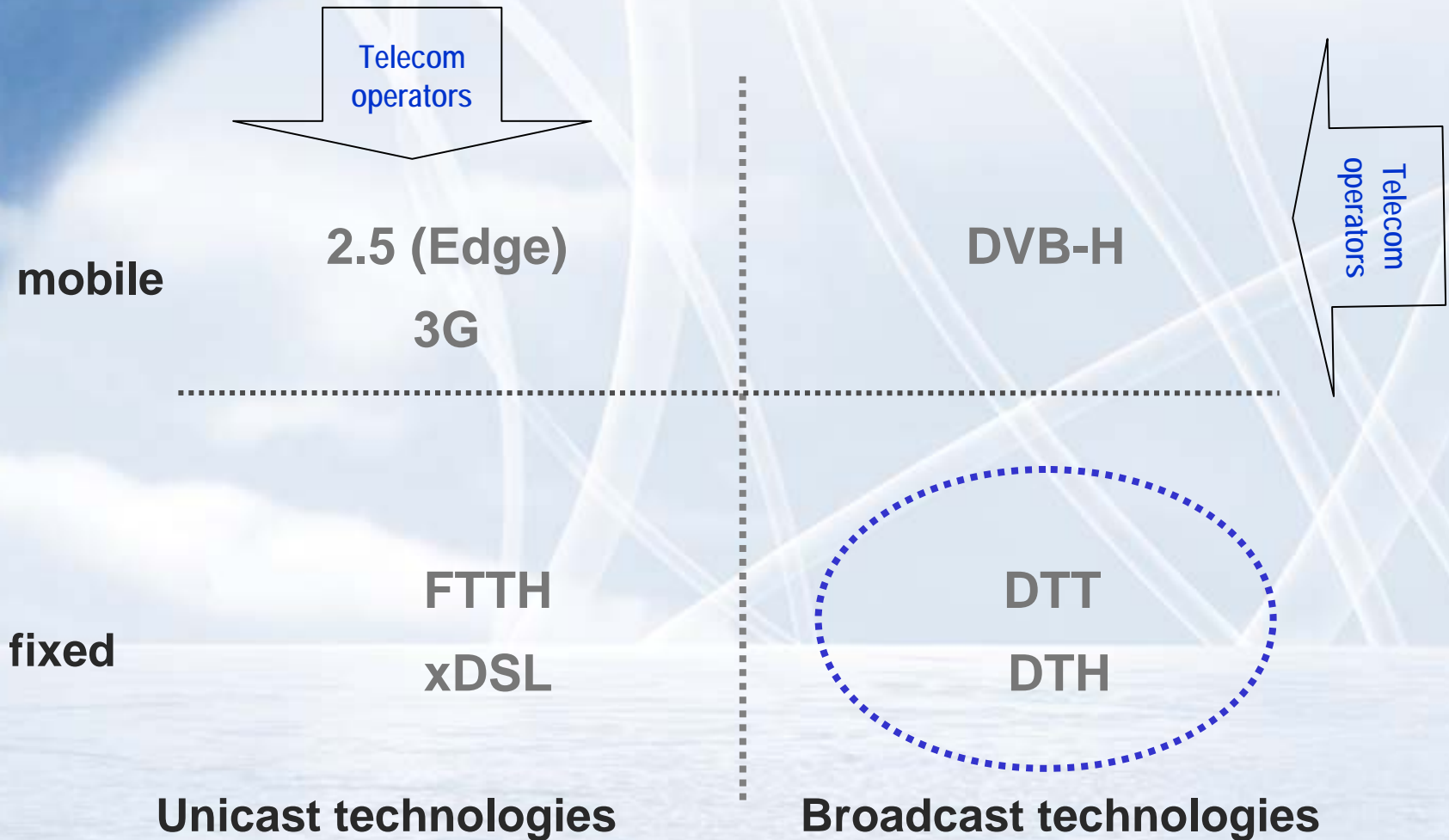


Convergence



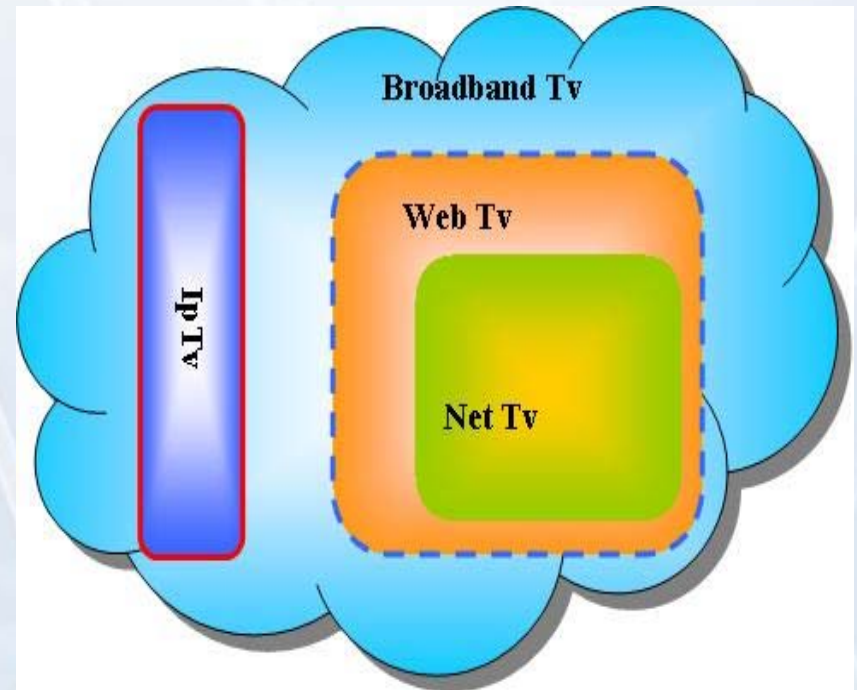
Convergence ends
“divergence age” in
which networks
grouth
indipendently.

Contents increasingly available on several digital platforms



Broadband Tv: a telecom-broadcasting market?

As growth of voice services is constantly slowing down, telecom operators are looking at broadcasting services as a potential and interesting source of revenues



Broadband Tv includes all television contents that are routed with:

- Internet Protocol (the universal language);
- Broadband (the necessary element to high quality contents transmission).

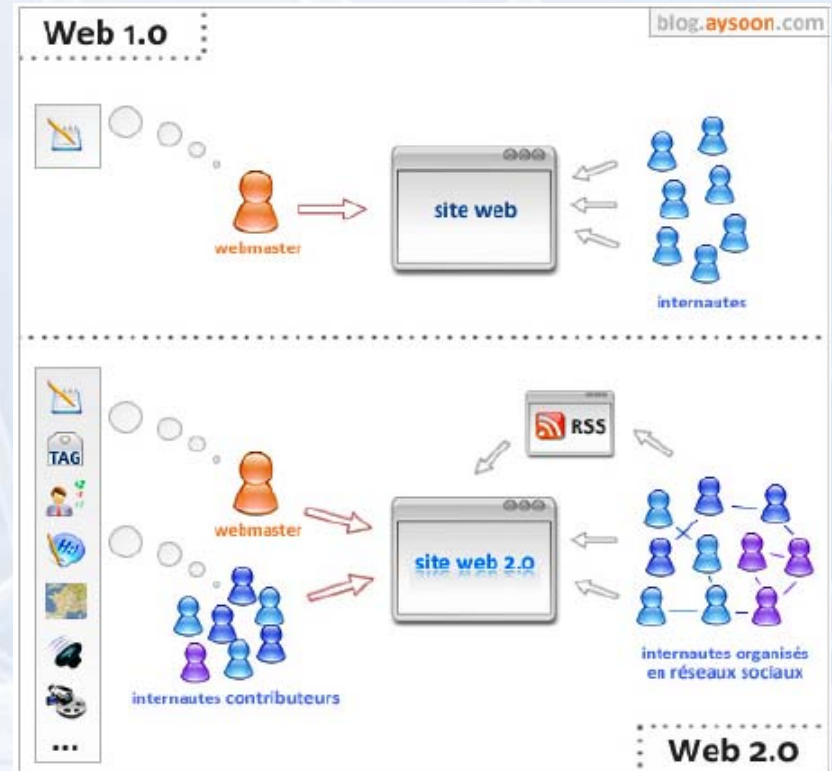
Some differences: IpTv & Web Tv

Commutation Protocoll	IP	IP
Standard	DVB-IP	RSS, P2P,
Entry Point	SD&S (Service Discovery & Selection)	Web site, Blog, RSS Reader,.....
Stream format	MPEG2, MPEG4	Various
Video format	MPEG-2, MPEG-4 (Part 2 e 10)	Windows Media, Quick Time, Flash Video, Real Networks
Network	Multicast, Unicast	Unicast, P2P
Definition	HD, Standard Definition	HD, Standard Definition, QCIF/CIF
Bandwidth	About 4 Mbit/sec	About 0,3 Mbit/sec
Receiver	STB IpTv	PC, STB, iPod, Apple Tv, Xbox ,

New user, UGC e Web 2.0

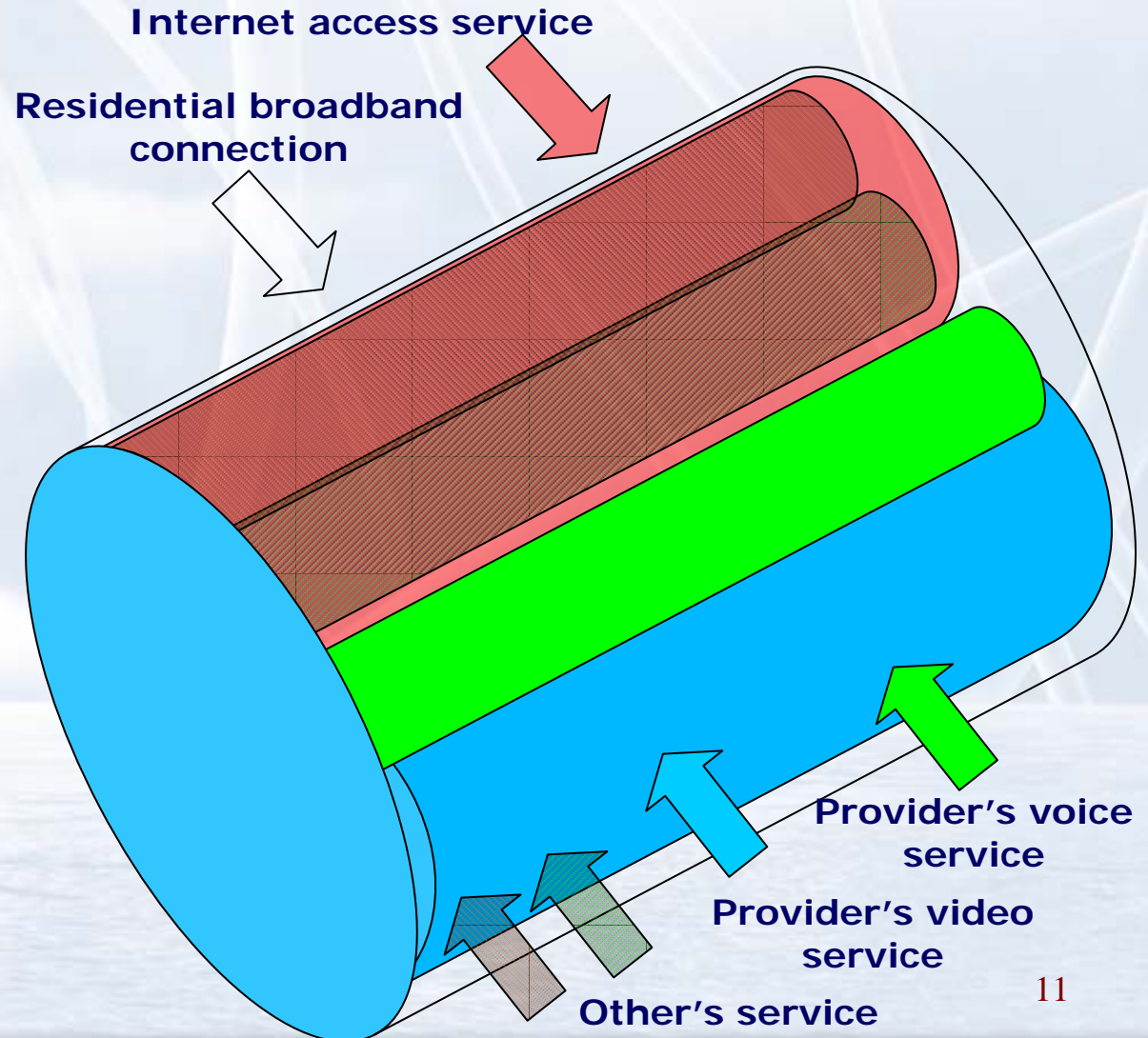
User have new roles depending of new social and cultural changes on media:

- Active role user
- Fan user
- Multicarrier User (see Tv as one of others)
- Generating content User (Internet like – social network)



New players: the TV sector *unbundling*

Old broadcaster player in digital TV splits in at least:



Content provider:
*programm editor of tv
and radio diffusion*

Network provider:
*owner of the network
allowed to elettronical
communication transmission*

Service provider:
*provide interactive or
conditionated acces services,
with pay per view too.*

Network operator

broadcasters

Content aggregator

Free to air content

**Wholesale offer
to service providers**

Service provider

**Billing and
customer
management**

Viewers/subscribers

Business model & “the long tail”

- Free to air model (canone and advertisement)
- Pay model (user direct payment)
- Multi-sources revenue model (advertisement, interactive services, t-commerce, etc.)
- Library business model, Web Tv typical, work on “The long tail”

Simulcast of existing programs



free-to-air/pay

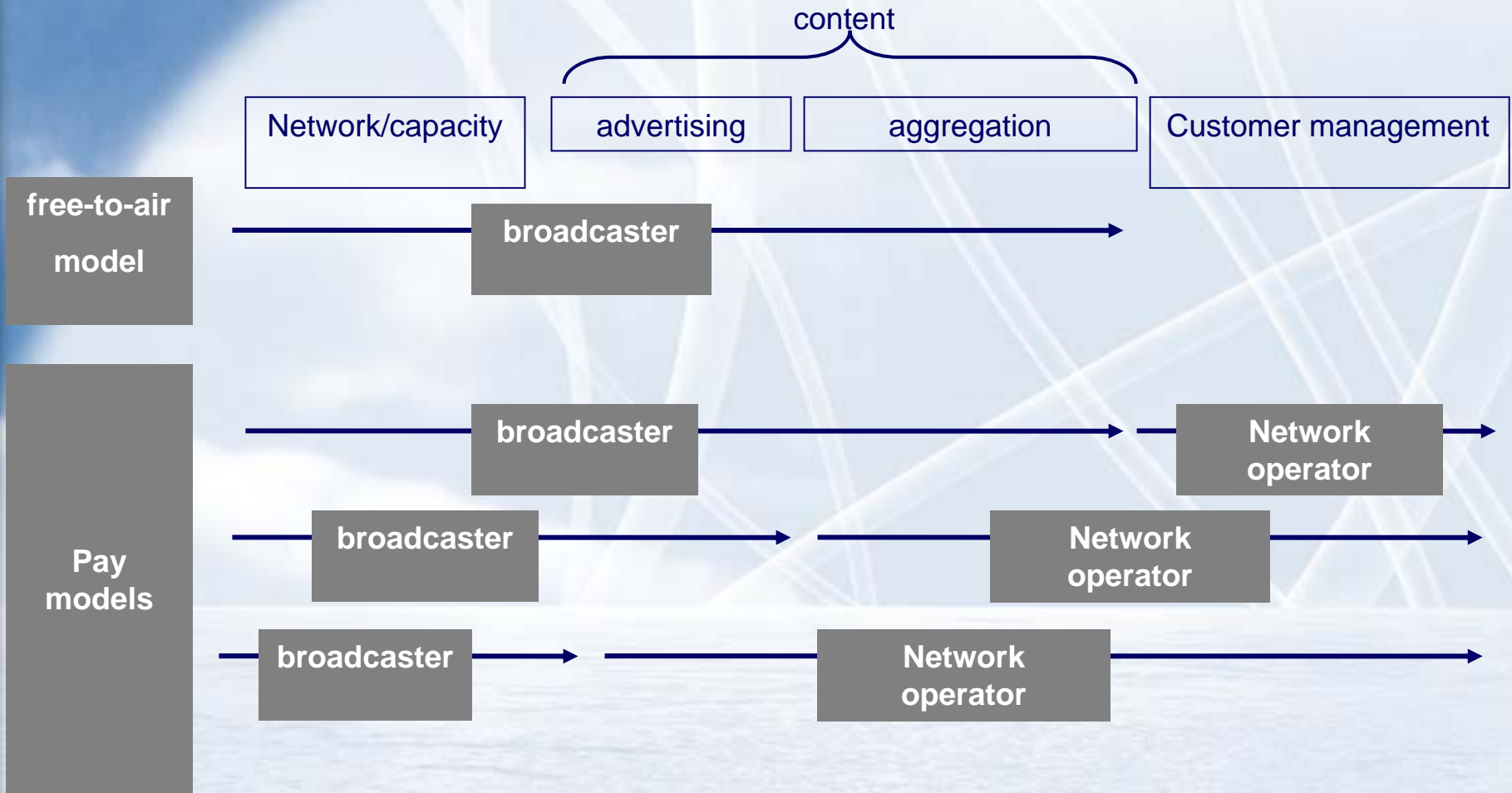
Ad hoc content specifically played for consumption

(Digital Tv as a specific entertainment experience)



pay

Business models – who does what

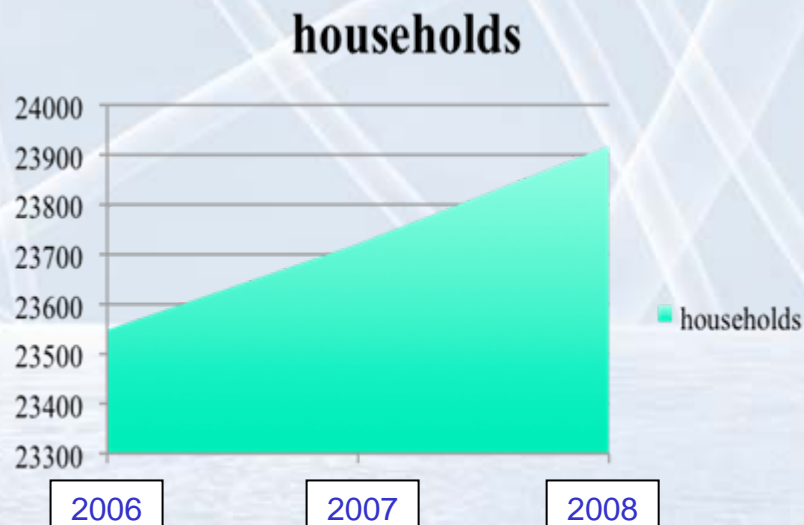


Competitive Digital Tv in Italy

Broadband digital Tv begin to be competitive with traditional transmission platform (satellite) and with the off line play like DVD and gaming, for it's presence in the market.



Tecnology growth %



Some regulatory trade-off

- Should regulation “encourage” a technical standard or should the market make the decision?
- How to allocate the “digital dividend” among different services requiring the same bandwidth?
 - Rigid “priority based” approach v. flexible “first come first serve” approach
- Should the policy makers be involved in the decision of which content should be made?
 - Flexibility of business models v. general interest (e.g. pluralism)
- Consumer protection v. operators legitimate revenue models
 - Lock in policies as a price for subsidization
 - Should free-to-air content stay free

Thanks for your attention

Enzo Savarese
AGCOM
Commissioner