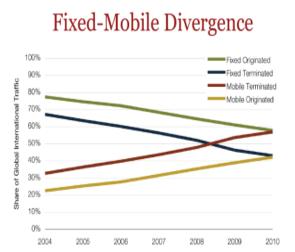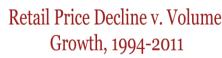# Carlos DaSilva

Director, Product Business Development
PCCW Global

The International voice business is slowing down in most regulated/ mature markets.
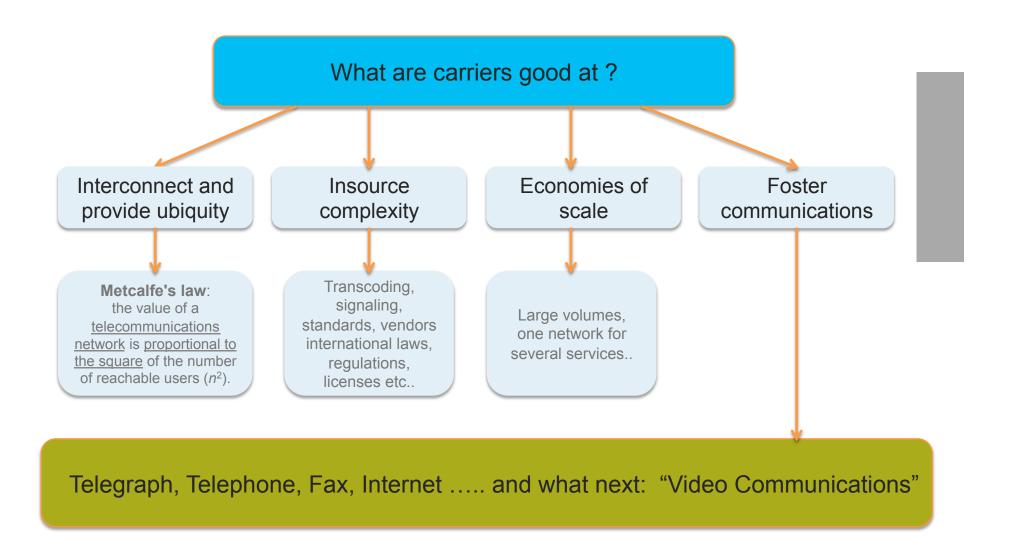

Fixed-Mobile Divergence

Retail Price Decline v. Volume Growth, 1994-2011

- **Spanish regulator to cut mobile termination rates by 80% from April 2012 till October 2014**
- **UK termination rates to be slashed by 83% by 2014**
- **Kenya to cut mobile termination rates by 35%**

from a "nice to have" to a "must have"

The industry needs to keep adjusting its voice business and find new models and other services

or be proactive and develop

The DNA of carriers' "know how" and products

What are carriers good at ?

Interconnect and provide ubiquity	Insource complexity	Economies of scale	Foster communications
Metcalfe's law: the value of a telecommunications network is proportional to the square of the number of reachable users (n^2).	Transcoding, signaling, standards, vendors international laws, regulations, licenses etc..	Large volumes, one network for several services..	

Telegraph, Telephone, Fax, Internet ….. and what next: "Video Communications"

The video market does not provide ubiquitous QoS IP interconnects

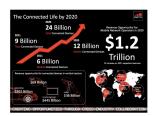**Private an QoS managed networks**

Internet

High-end HD conference market
is growing with double digits

Point-to-point HD video call
has a demand but no market offering yet

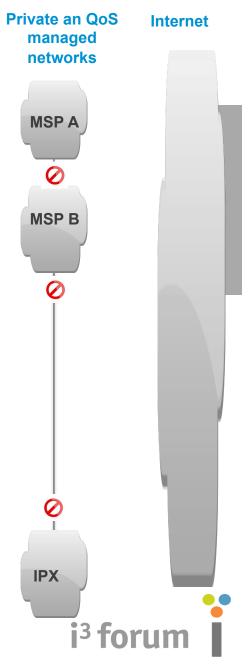More and more new TV sets come
with Skype built-in

Number of mobile devices do not stop growing
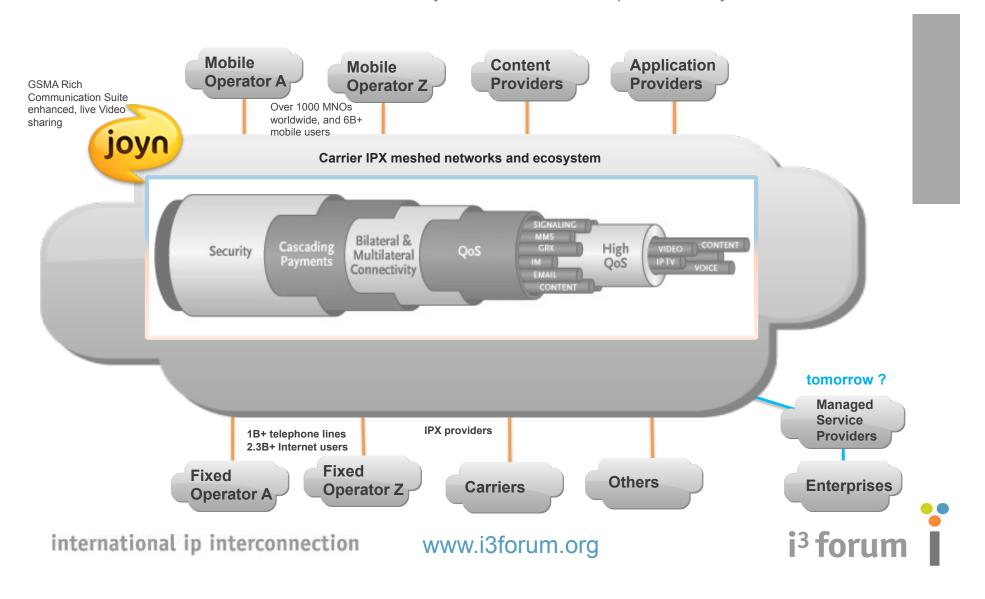and every new one comes with an HD camera

Fiber and 4G will give greater access bandwidth
and spur new usages

MSP A

MSP B

IPX

international ip interconnection
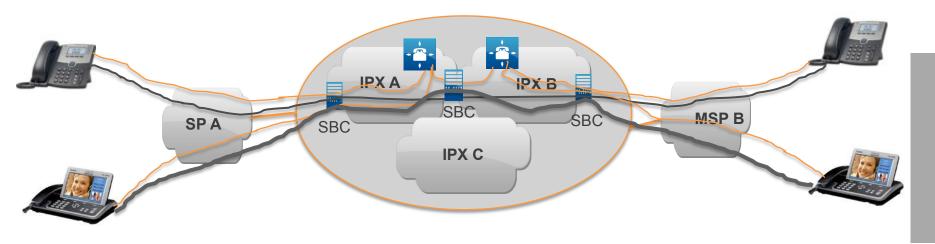
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Basic principles of the Carriers IPX ecosystem

The carrier IPX ecosystem is an ecosystem available for and beyond mobile operators to all other service providers that need IP QoS, SLAs for audio, video and other proxies hubs to enable end-to-end services in a technical and commercially sustainable and competitive ecosystem.

GSMA Rich Communication Suite enhanced, live Video sharing

joyn

Mobile Operator A

Over 1000 MNOs worldwide, and 6B+ mobile users

Mobile Operator Z

Content Providers

Application Providers

Carrier IPX meshed networks and ecosystem

Security

Cascading Payments

Bilateral & Multilateral Connectivity

QoS

SIGNALING
MMS
GRX
IM
EMAIL
CONTENT

High QoS

VIDEO
IP TV

CONTENT
VOICE

tomorrow ?

Managed Service Providers

1B+ telephone lines
2.3B+ Internet users

IPX providers

Fixed Operator A

Fixed Operator Z

Carriers

Others

Enterprises

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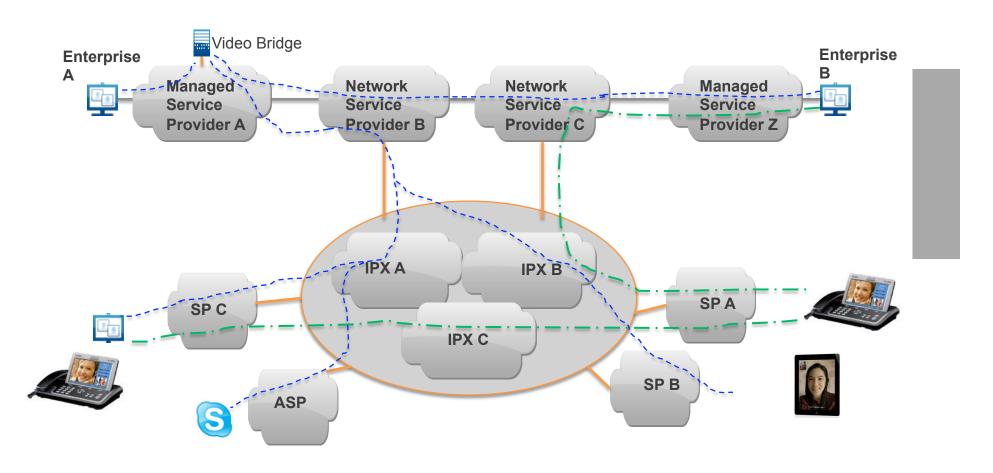# Carriers IPX and Video over IPX is a natural evolution of voice

- **IPX providers can enable HDVC over IPX with limited incremental capex required**

  - use existing voice controller for signaling

  - use existing (or similar SBCs).

  - use existing IPX network

  - use existing rating and billing tools for transport

- **Required extra work and capex to deliver HDVC over IPX**

  - develop product (including OSS/BSS) and ecosystem

  - define operational/technical/business principles for interconnections, including routing and addressing.

Example of video communications and carriers IPX interaction

With a greater interconnection of end-points comes a greater probability of calls and greater revenue and customer satisfaction

- - - - Carriers IPXs can enable other SPs customers to join videoconferences in a QoS managed environment and compatible business model.

- · - · Carriers IPXs can enable point-2-point HD video calls

Together we need to bring about the IP Future !

- I3forum will pursue internal discussions and works to enable a greater reach of High Definition Video communications with managed QoS, sustainable ecosystem, and ease of use for end-users

  - ENUM, routing and addressing
  - Signaling
  - QoS, SLAs
  - Business model, procedures etc..

Keep in touch, follow us or join us for this new enabler of peoples communications

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