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ITU-D REGIONAL ECONOMIC AND FINANCIAL FORUM OF TELECOMMUNICATIONS/ICTS FOR ARAB STATES

Impact of Internet and OTT on Services

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Impact of Internet on services

- Issues on evolution for voice and new services
- NGN driving services and ICT e-services
- New players and OTT services
- Strategies for evolution

Impact of Internet on services

- Issues for voice and new services
  - Voice service increase versus decrease or migration?
  - Voice revenues evolution?
  - New services substituting classical voice?
  - What impact of new services on traffic and revenues?
  - From country monopoly to … multiple country providers versus… worldwide oligopoly?
  - … and many more

Impact of Internet on services

- Topics to analyze
  - Main driving services for NGN (Next Generation Networks)
  - New capabilities of NGN and web based services
  - Main e-services at national level
  - OTT (Over the Top) positioning for web based services
  - Service provider positioning on the new market
  - Economies of scale versus market fragmentation
  - Strategies recommended for the service providers

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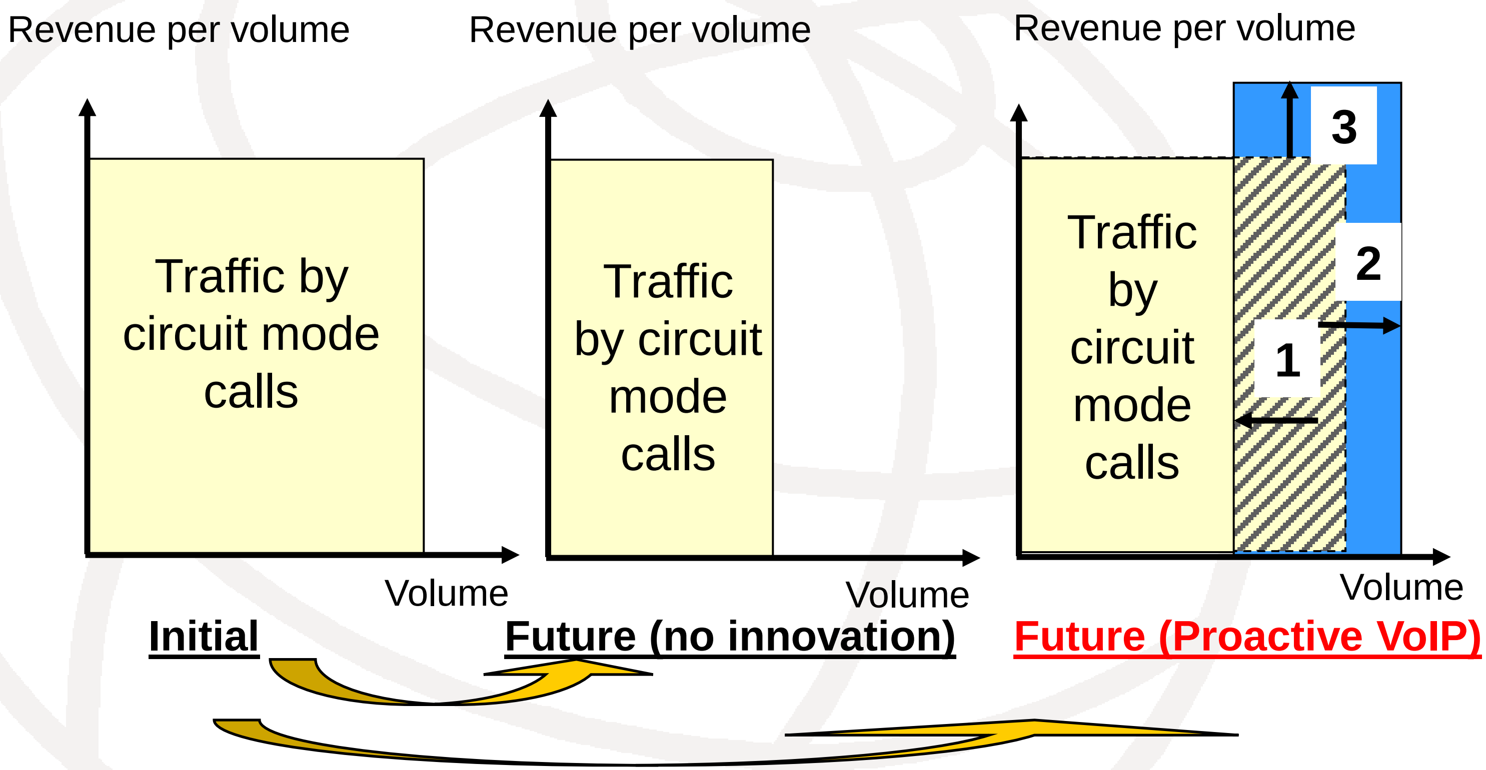
Impact of Internet on services
NGN driving services

- Residential type
  - **VoIP** (Voice over Internet Protocol):
    - Motivation: Cost saving, integration with chat and video
    - Concerns: Cannibalization, Interconnection and QoS
  - **IPTV** (Internet Protocol Television): Wide selection, video on demand and special events
  - **Content delivery**:
    - Music, games, gambling

Impact of Internet on services
NGN driving services

VoIP positioning for a service provider



1: Decreasing by substitution

2: Volume increase by lower price

3: Revenue increase by new associated services

Revenue due to existing offer
Revenue variation due to the change of offer
Incremental revenue with the new offer

Revenue due to each solution

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Typical Skype prices from smart terminals to fixed telephone

- From Spain to:
  - EU countries, Korea, Malaysia, Australia, Canada, etc: 2 cents/min
  - Moroco: 1,7
  - Iran: 4,5
  - Egypt: 7,8
  - Saudi Arabia: 8,2
  - Kuwait: 9,8
  - Algeria: 10,4
  - Oman: 14
  - United Arab Emirates : 14,1
  - Yemen: 15,6
  - Bahrain: 19
  - Qatar: 29
  - Iraq: 29
  - Syria: 29
  - Tunisia: 29,4
  - Palestine Authority: 31,9
  - Somalia: 52,8

- *Ratios up to 30:1 among countries. Special discounts also apply per volume and flat tariffs per month*

- *Current operators tariffs up to 100 times greater except for some highly connected countries*

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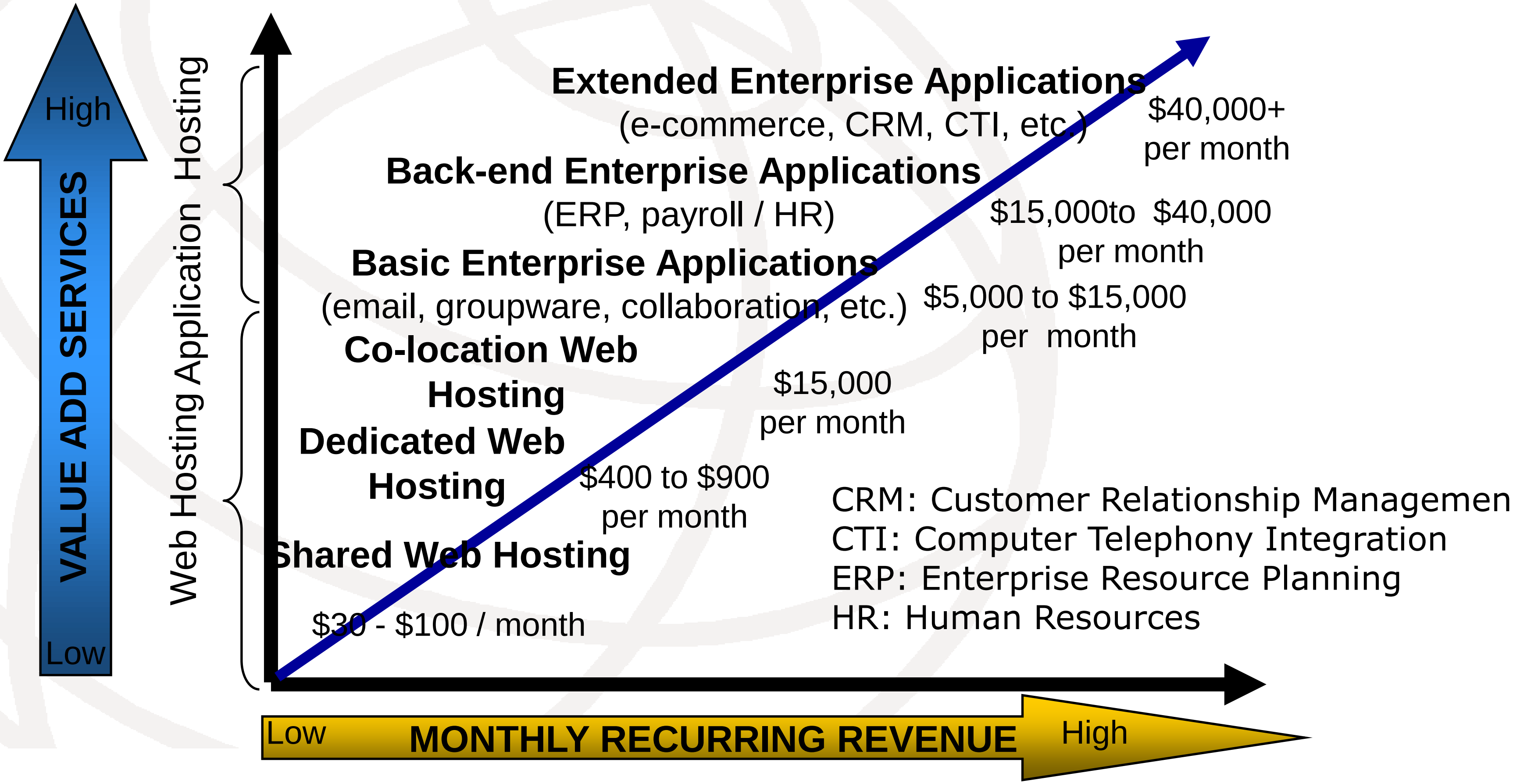
NGN Driving Services for Business

- **Virtual Private Network (VPN): Customized operation**
- **Multimedia Conferencing: Quality increase for multiparty**
- **Unified messaging: Better productivity and efficiency**
- **ASP (Application Services Provider): Wide availability and adaptation of IT services**

Impact of Internet on Services

NGN Driving Services for Business

Main ASP applications and projected value/revenue added



Source: Cherry Tree & Co

Impact of Internet on Services
NGN driving applications as indicated at UIT-D Q.20

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- **E-Government**
- **E-business**
- **E-science**
- **E-learning and Mobile Learning**
- **E-health**
- **E-agriculture**
- **E-environment**
- **Telecom Support to public security, catastrophe prevention and emergency aid**

ICT: Information and Communication Technologies

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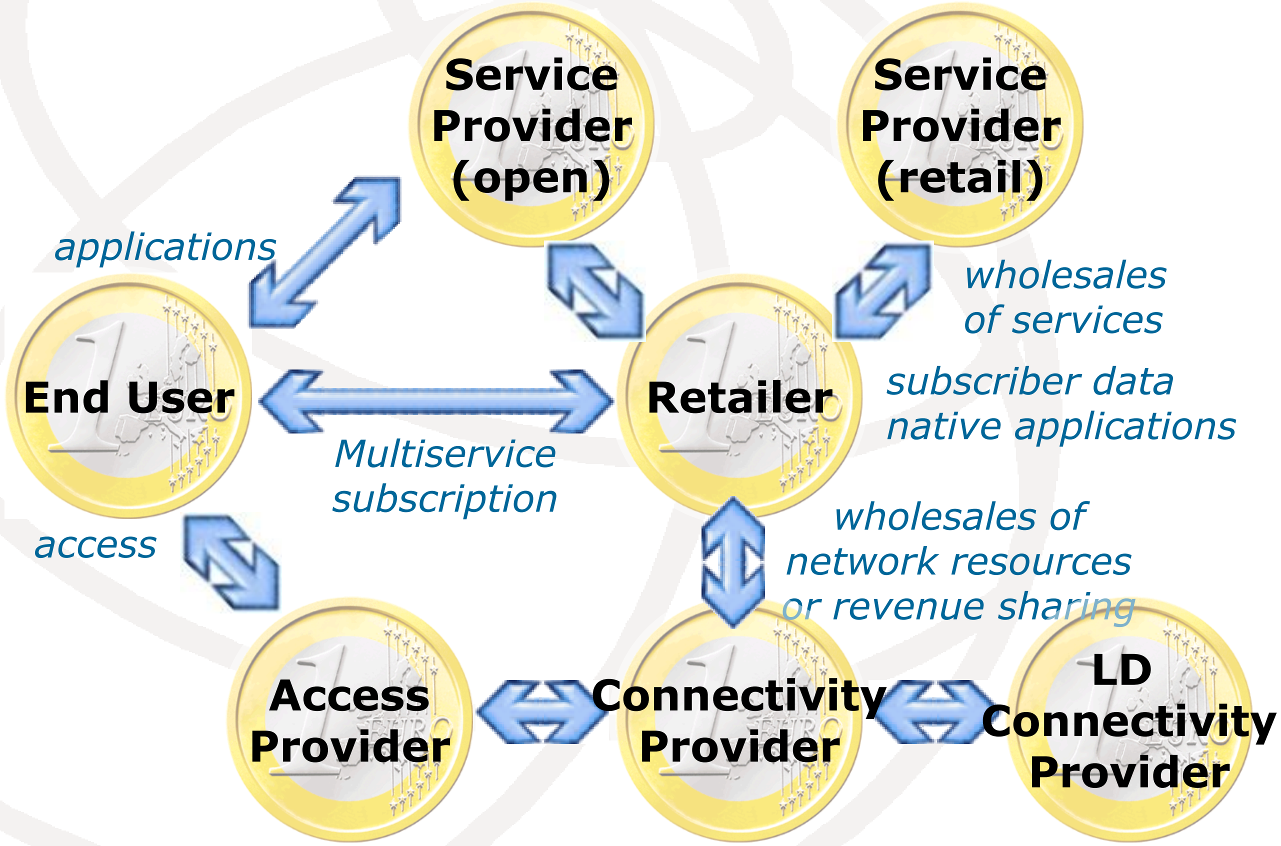
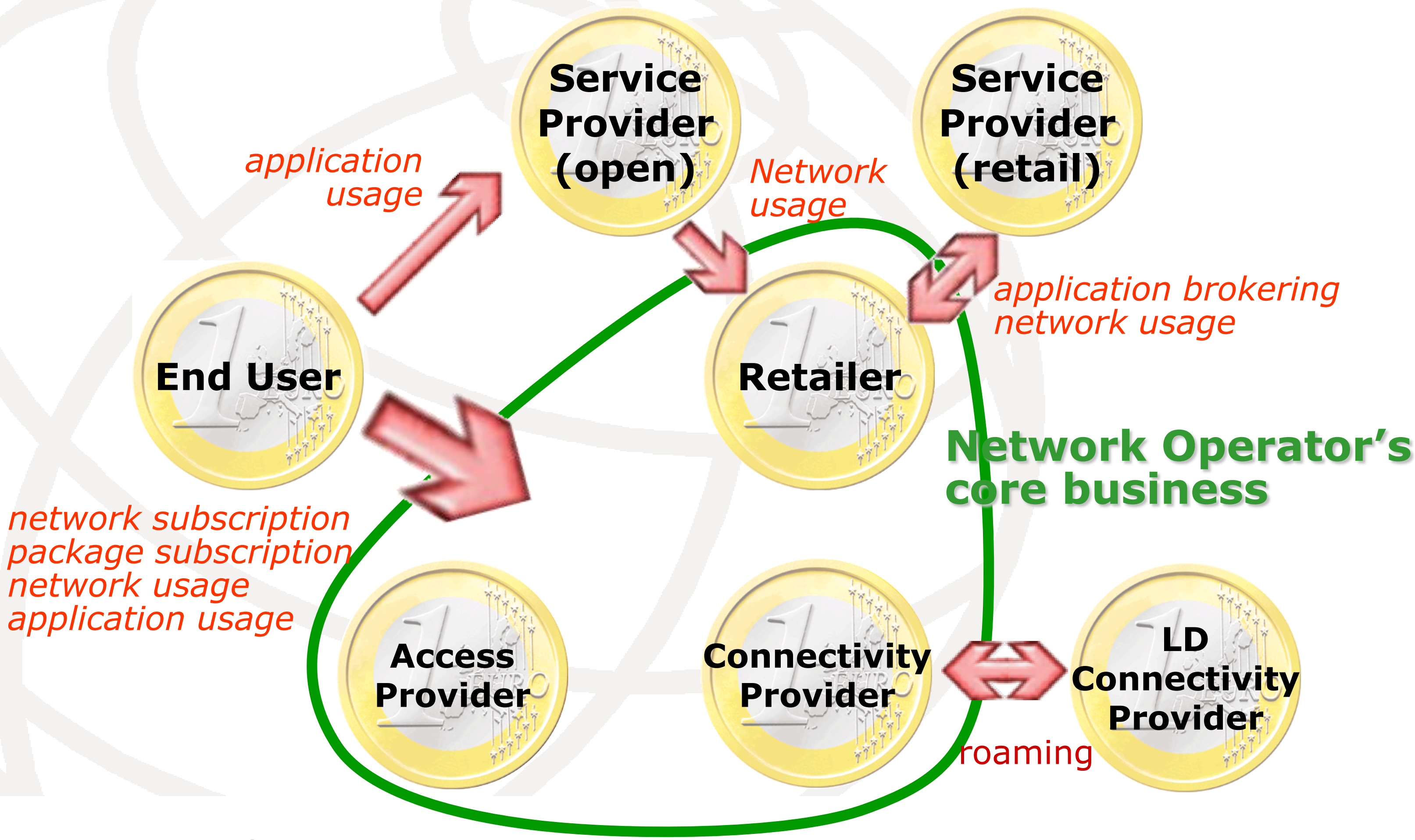
New players in service provisioning and interrelations



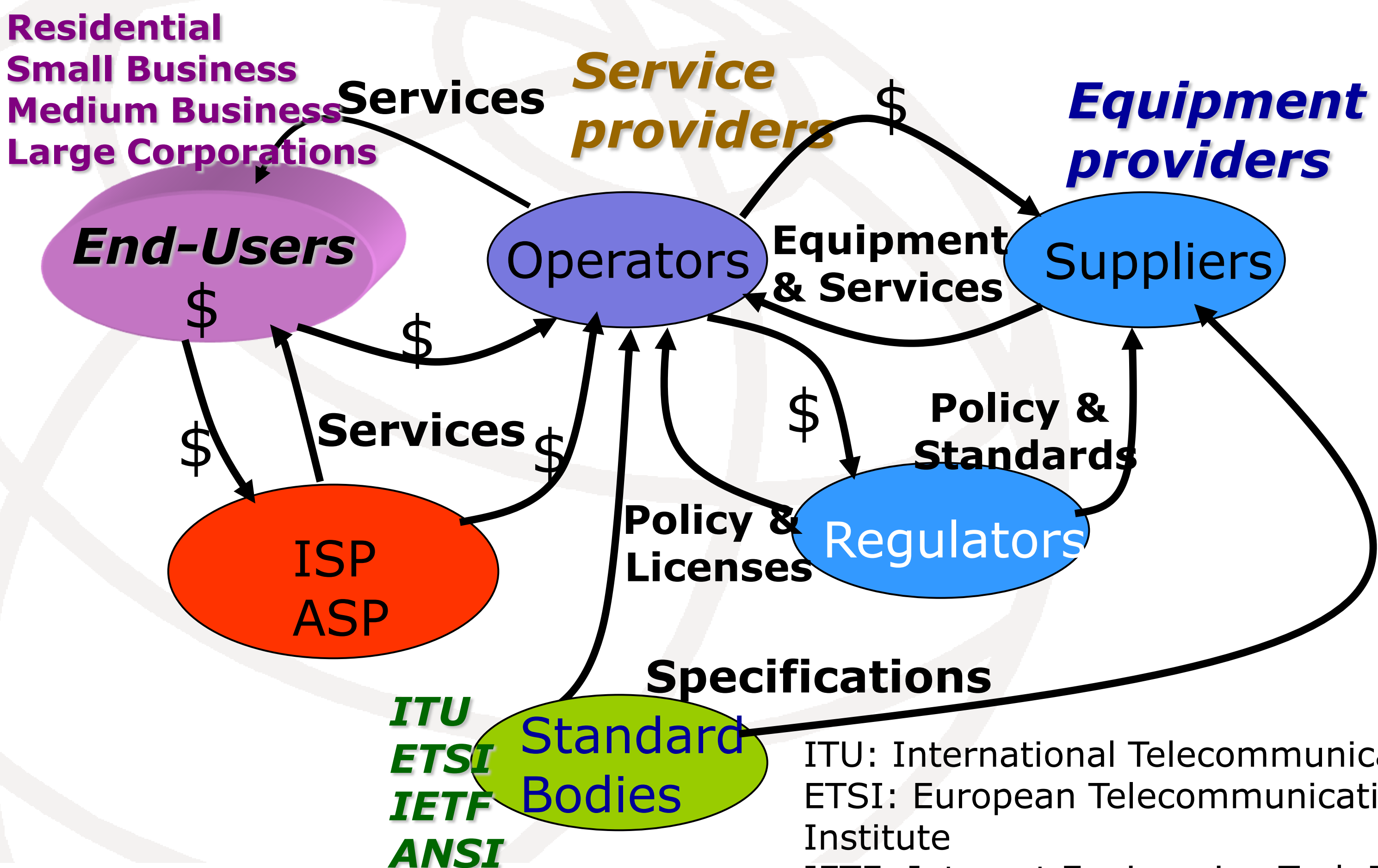
LD: Long Distance

Impact of Internet on Services New players in service provisioning and interrelations



LD: Long Distance

Impact of Internet on Services
Players in new service definition and interrelations



ITU: International Telecommunication Union
ETSI: European Telecommunication Standards Institute
IETF: Internet Engineering Task Force
ANSI: American National Standards Institute
ISP: Internet Service Provider

Impact of Internet on Services
OTT players (web based)

- Skype
- Google voice
- WhatsApp*
- LINE
- Twitter
- Facebook
- Linkedin
- Paypal
- Tencent QQ
- …. And many others

* WhasApp recently acquired by Facebook but maintaining original objectives

Impact of Internet on Services
OTT main services

- VoIP + videoconference
- Content delivery
- Messaging
- Chat
- Social networking
- Instagram
- Wallet
- … and many other innovations

Impact of Internet on Services
OTT positioning

OTT services volume*

- **Skype: at 2013 300 million users with around 70 million connected simultaneously and with an average call holding time of 7 minutes. Around 2 billion minutes per day**
- **WhatsApp: at 3Q 2014 600 million active users with 11 billion messages send, 20 billion received and 325 million photos per day**
- **Facebook: at 1Q 2014 1200 million users (680 million on mobile), 700 billion minutes and average duration of 20 minutes**

*Ref: http://www.statisticbrain.com/, Telegeography and others

Impact of Internet on Services
OTT positioning

OTT services volume …

- **Twitter**: at 2Q 2013 **555** million users and **58** million tweets per day

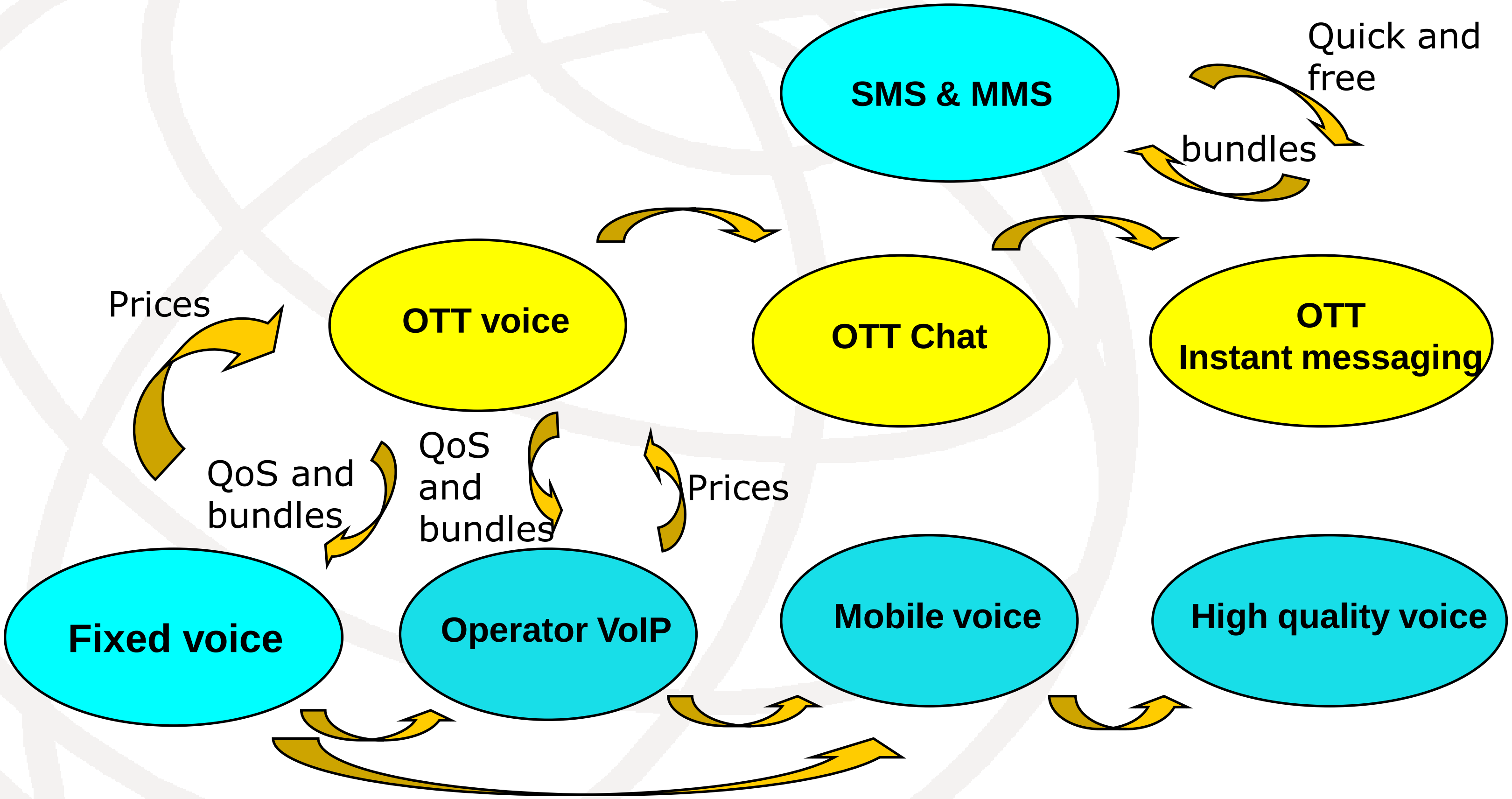
- **LINE:** at 1Q 2014 **400** million users with highest number in Japan

- **LinkedIn**: at 4Q 2013 **300** million users, **2,1** million groups and **200** conversations per minute.

- **PayPal**: at 1Q 2014 **150** million active accounts with **2,8** billion payments at 2013

Impact of Internet on Services
Services migration flows

Highlight of voice and services migration towards other solutions, related drivers and reverse flow drivers



Overall voice traffic increases but is shared among all existing solutions

SMS: Short Message Service
MMS: Multimedia Message Service
QoS: Quality of Service

Impact of Internet on Services
OTT positioning

Strengths

- Benefit from worldwide coverage by internet and quick deployment
- Exploit of large economies of scale
- Exploit high broadband data capacities
- Benefit from publicity revenues
- High negotiation power towards suppliers

Weakness

- Difficulties to assure end to end quality control and OSS/BSS support
- Less advantage for proximity and consumer experience related requirements
- Lower capability for country national and local dependent services

Differences on Regulation versus Operators

- No constraints for OTTs derived from regulatory rules
- Lack of contribution to the Universal Services Fund and very limited contribution to national Taxes.

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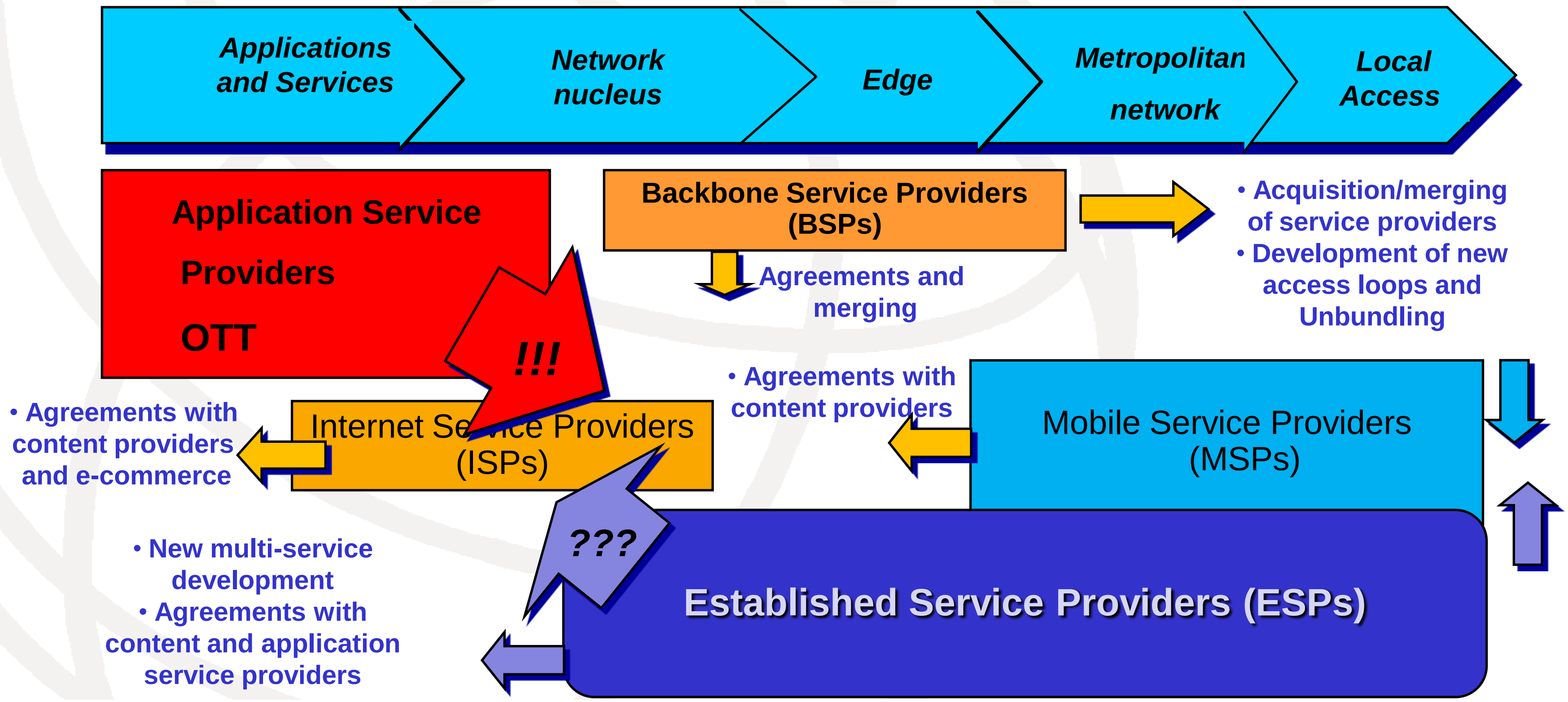
Business domains and trends

Example of Value Added chain and operators movements to gain economy of scale and market



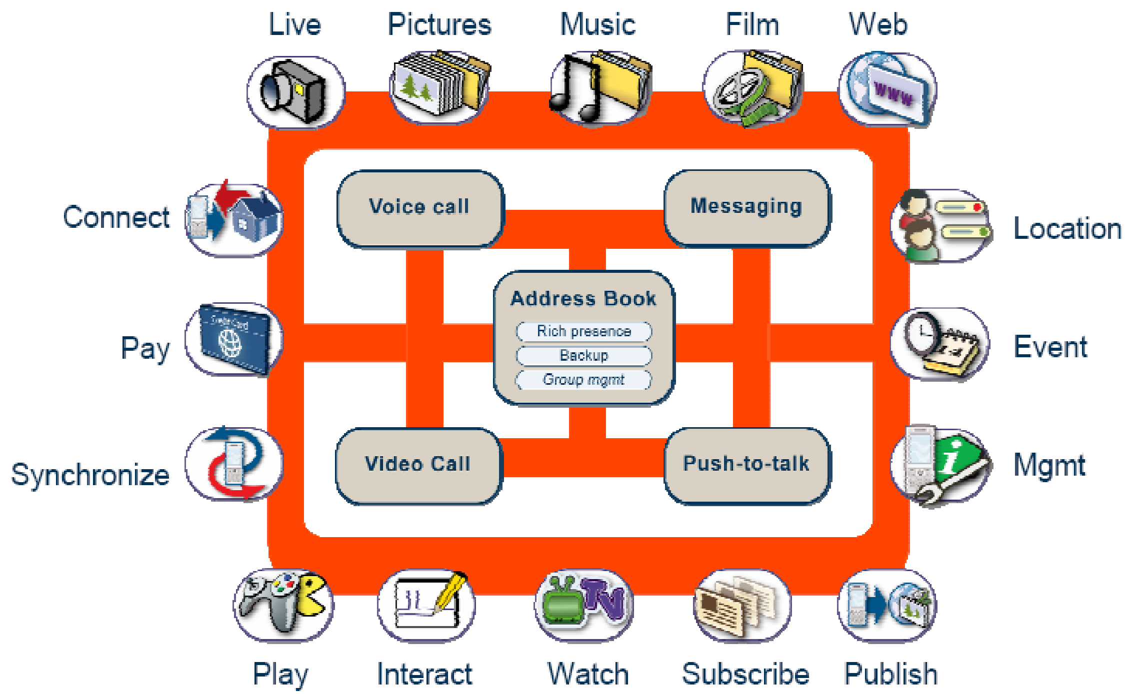
Impact of Internet on Services
Industry Initiative for multiservice compatibility

Forum multioperator and multisupplier to reinforce new IMS (Internet Protocol Multimedia Subsystem) based services compatibility and interoperability from the operator side

Impact of Internet on Services
Industry Initiative for multiservice compatibility

RCS Vision - A richer experience

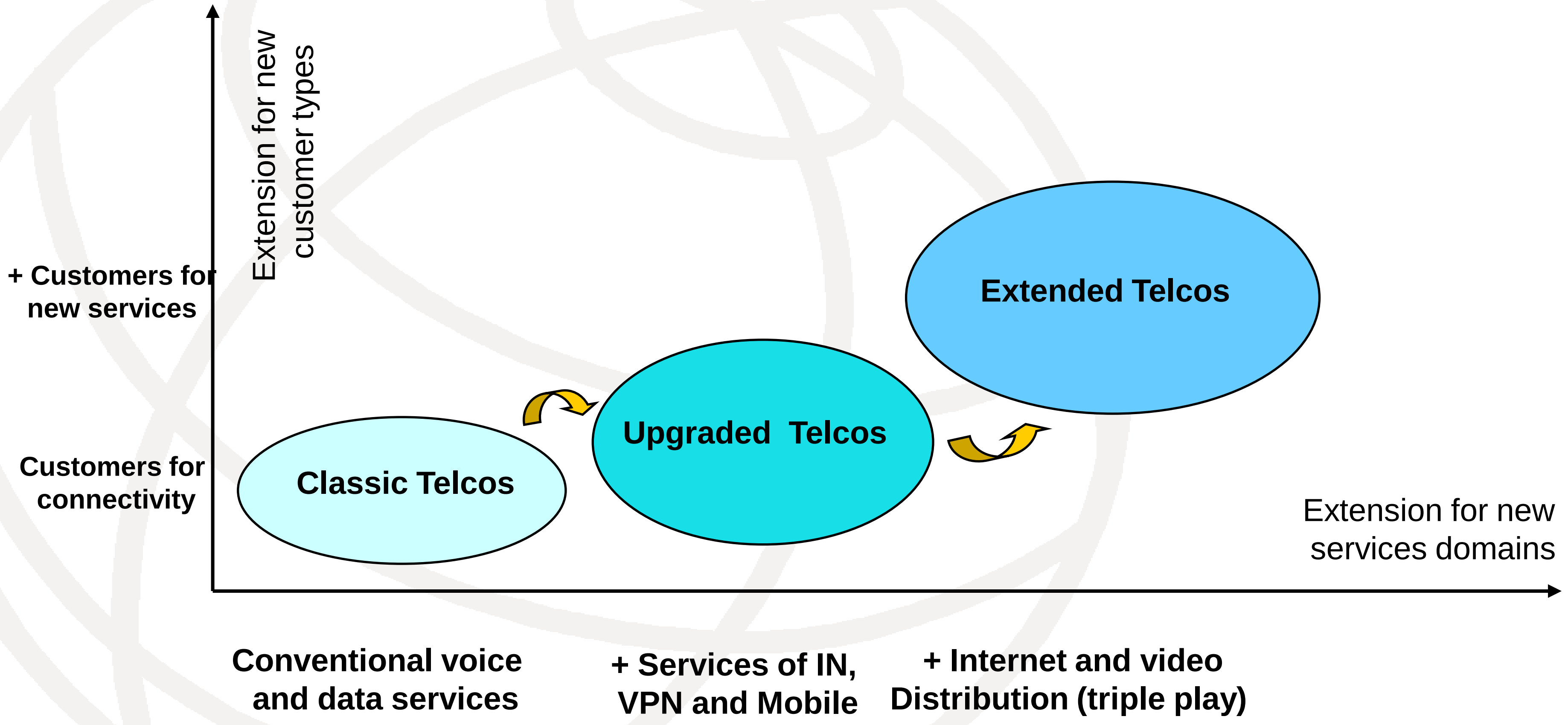
Freedom, control and belonging



Vision by the RCS forum for personalized services and social networks based on generic functions and affinity grouping

Impact of Internet on Services
Strategy on Business Migration Leaps

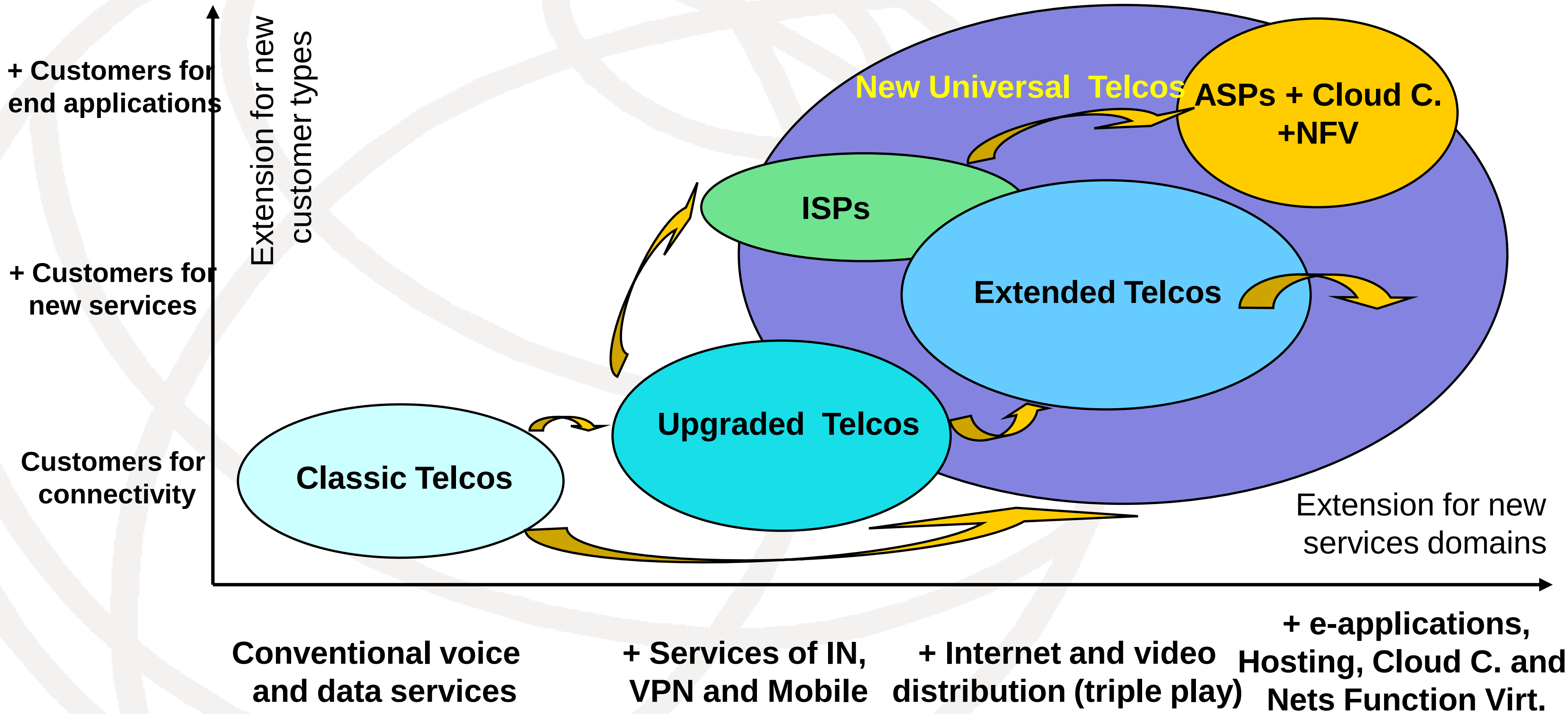
"staircase" for leading growing alternatives



IN: Intelligent Network

Impact of Internet on Services
Strategy on Business Migration Leaps

"staircase" for New Universal Telcos from operator and web sides

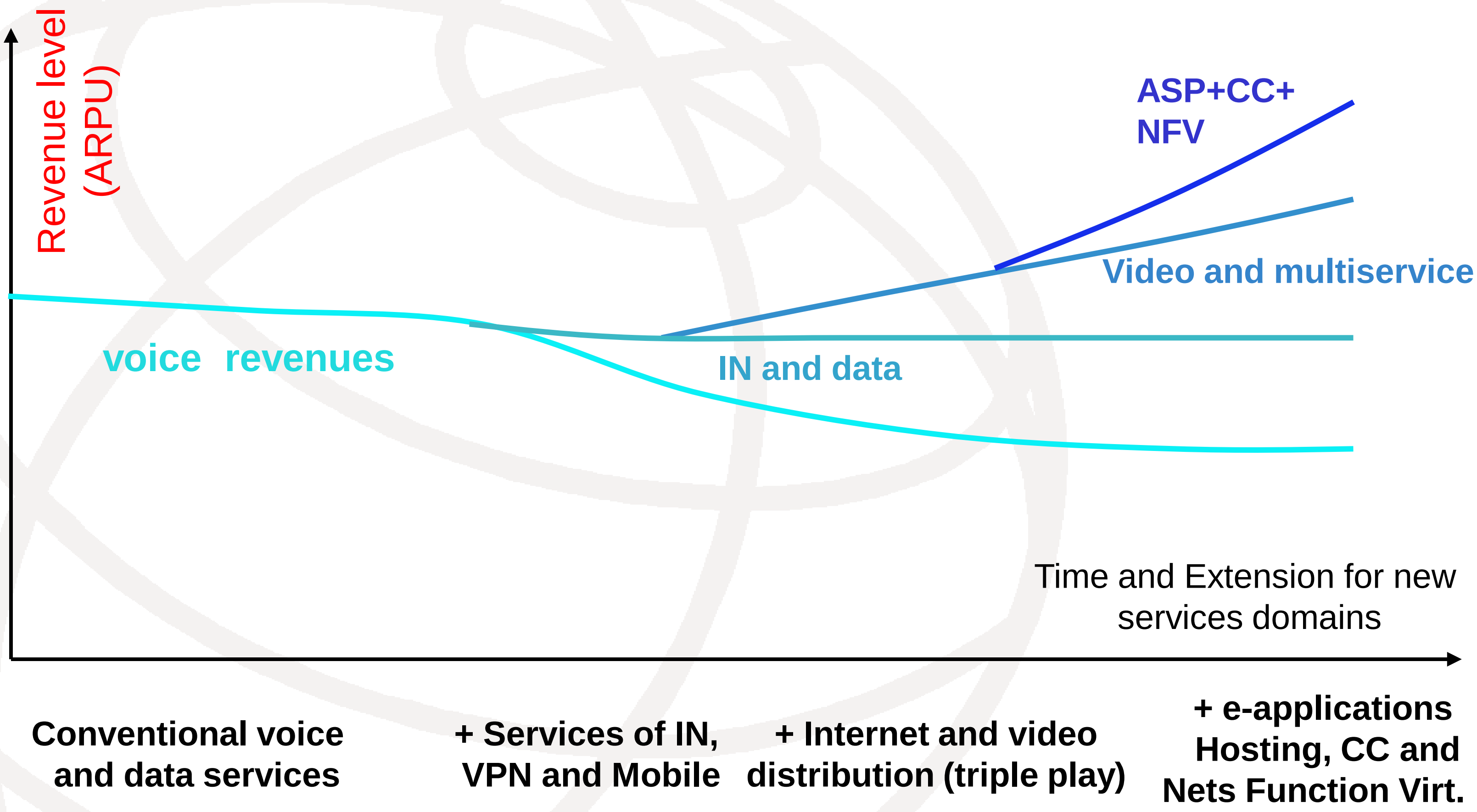


Specific migration and timeframe to be optimized for the country context and regulatory conditions

CC or Cloud C.: Cloud Computing

Impact of Internet on Services
Trends on Convergence

Projected evolution of revenues with service domains



Convergence strategy is fundamental to grow in a competitive environment and compensate from voice revenue decrease (typical 7% per year)

Impact of Internet on Services
Current attitudes by service providers

- 1- Ignore or obstruct OTTs capabilities and offers
- 2- Replicate OTTs offers within the in-house potential service provisioning
- 3- Provide services to OTTs under demand
- 4- Create subsidiary OTT companies to compete directly with existing OTTs
- 5- Joint development of applications with carrier grade quality with selected OTTs and use of Open Operation Platforms

Impact of Internet on Services
Recommendations for operators actions

- 1- Analyze specific demand of new services and consumer experience per country

- 2- Develop flexible tariffs and bundle offers

- 3- Accelerate NGN multiservice deployment

- 4- Positioning of service providers for higher value added in the services chain

- 5- Define best strategy for competition versus win-win cooperation or partnership with OTT's

Impact of Internet on Services
Summary of Key Factors

- Exploit **high potential** for new NGN services drives the interest in the network modernization and capture of **new revenues**

- Analyze **new business chain** from content to delivery and **watch** OTT services capabilities

- Provide attention to **Quality of Service on VoIP** and **Consumer experience**

- Define a **Specific Strategy** for new services and bundles considering consumer behavior and positioning versus OTTs

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