



ERICSSON

BRIDGING THE DIGITAL DIVIDE: THE ROLE OF MOBILE BROADBAND

ITU REGIONAL FORUM FOR ARAB REGION,
TUNIS, TUNISIA, MAY 7-9, 2013





ERICSSON

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VICE PRESIDENT, INDUSTRY RELATIONS
GROUP FUNCTION TECHNOLOGY



ERICSSON AT A GLANCE



40%

Of the world's mobile calls are on Ericsson networks

950M

Subscribers in networks that we manage

30,000

Number of patents

2.5B

Subscribers on Ericsson supported networks

110 255

Number of employees

34B

USD, Net sales 2012

180

Countries we operate in



AGENDA



DIGITAL DIVIDE & NATIONAL BROADBAND PLANS

MOBILE MARKET BY THE NUMBERS

MOBILE MARKET TRENDS

THE NETWORKED SOCIETY

SOCIAL IMPACT AND POLICY IMPLICATIONS

PARTING THOUGHTS

DIGITAL DIVIDE: WHAT IT MEANS



- › Broadly construed, Digital Divide refers to inequality between groups in terms of **access to, use of & knowledge of** information and communication technologies
- › The **differential access to ICT** has largely three dimensions: **Spatial** (i.e., the rural/urban divide), **Economic** (i.e., affordability) and **Historical**
- › Of course, there are also whole bunch of socio-economic and cultural reasons, beyond mere demography
- › **Second Order Digital Divide: the Production Gap**
- › Refers to 'divide' between those who are capable of creating Internet content and those who are capable of merely consuming it
- › This can be a serious power differential between groups and societies

NATIONAL BROADBAND PLANS



- › In 2010, at the UN Summit on Millennium Development Goals, the ITU issued a report: “A 2010 Leadership Imperative: Towards a Future Built on Broadband”
- › Declaring it a “basic human right” the ITU challenged politicians, UN agencies, and industry to ensure broadband access to more than half the world by 2015
- › Result: Governments across the world have launched, or are launching, National Broadband Plans. The key element is **inclusiveness**
- › Given dearth of fixed infrastructure, and for reasons of costs and speedy deployment, mobile broadband is widely seen as key to achieving policy goals

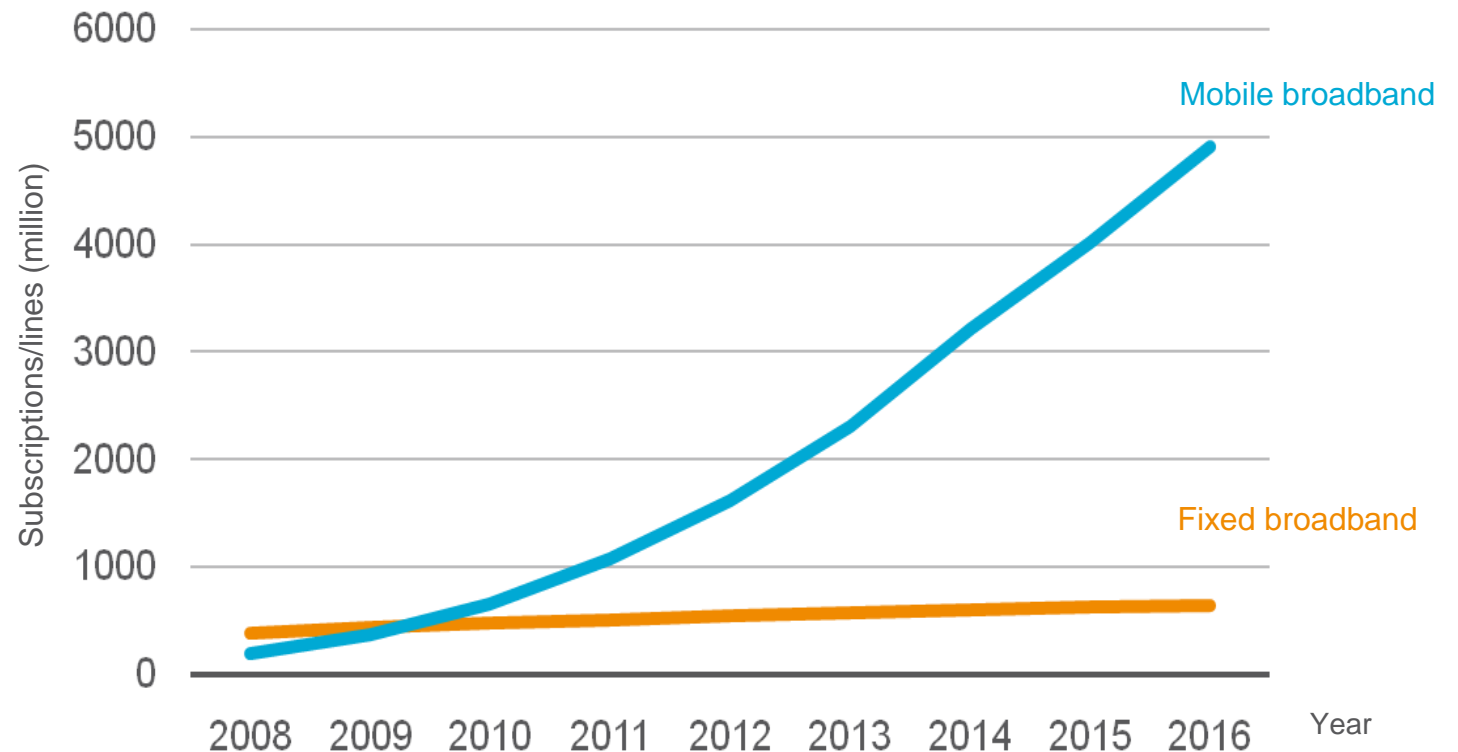
BROADBAND & ECONOMIC GROWTH



10% POINTS INCREASE IN MOBILE PENETRATION = 1% GROWTH OF GDP

Every 10% increase in broadband penetration is shown on average to deliver a GDP growth of 1%.

Broadband access has a significant effect on economic growth, with 80 jobs created for every 1000 broadband connections.



Sources: World Bank, Chalmers Institute of Technology, Arthur D Little, Ericsson

THE AFRICAN ENVIRONMENT



*National
Broadband
Plans*

*Wireless
& mobile*

*Africa -
exponential growth
in data*

*Submarine
cables
landing*

*HSPA+
& LTE*

MANAGING TRAFFIC GROWTH

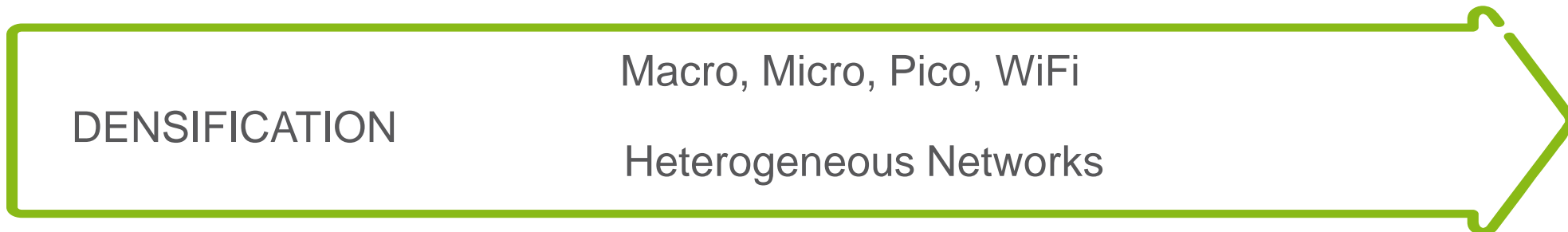
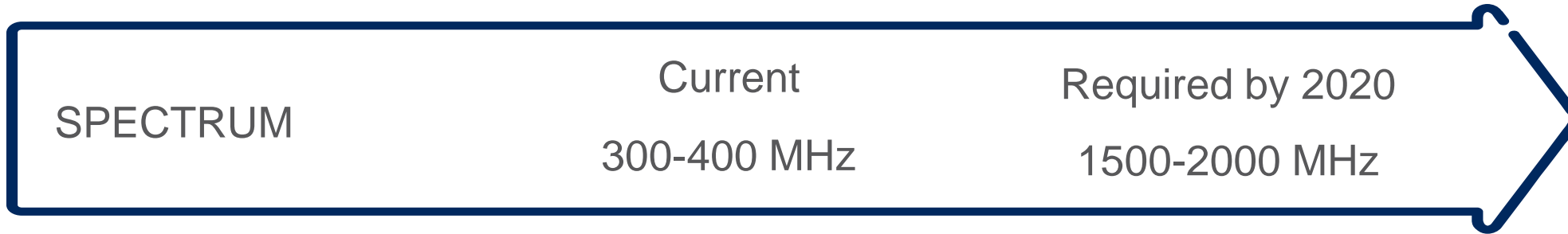


Spectrum

Technology

Densification

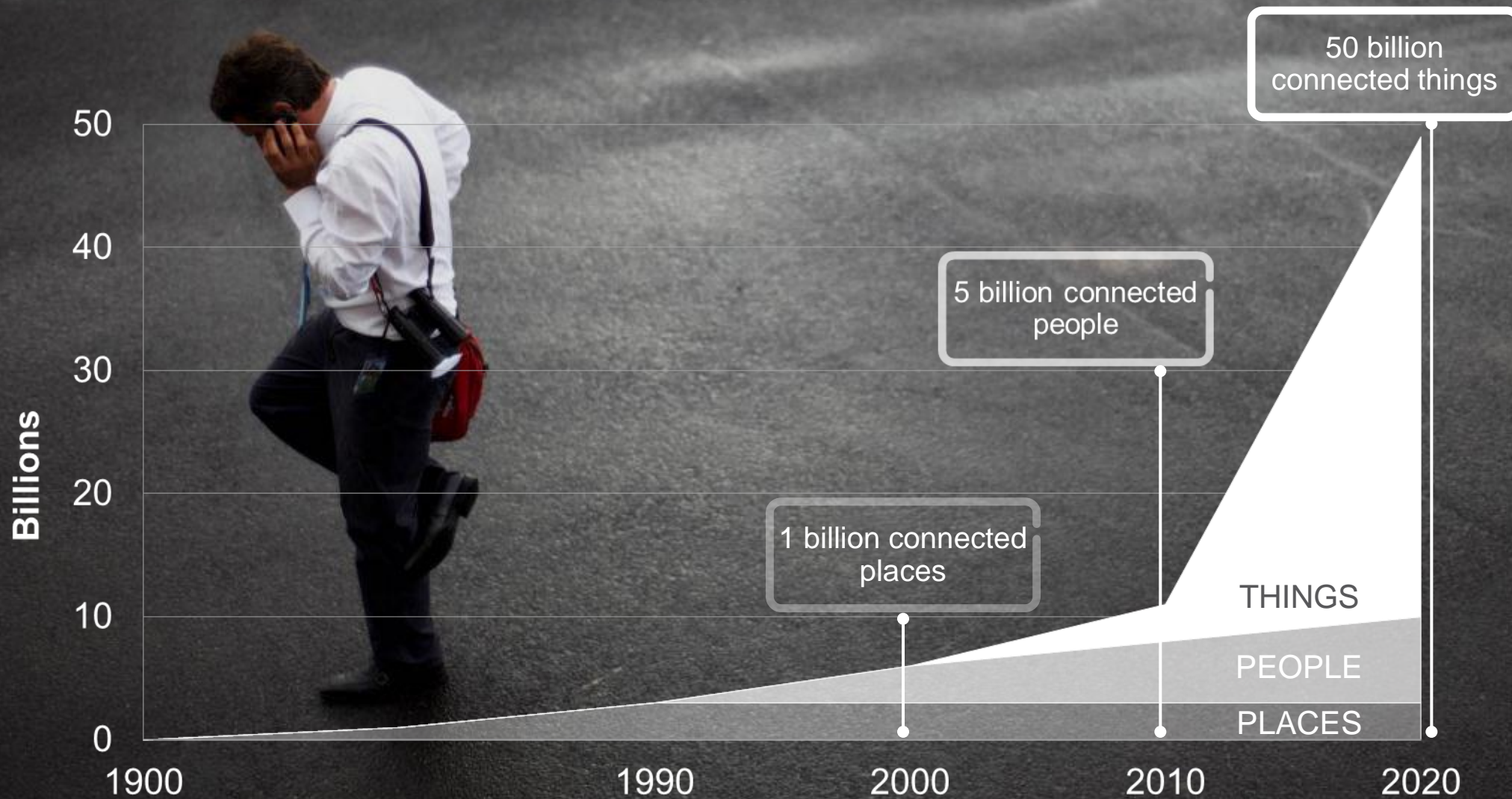
TOOLS FOR CAPACITY GROWTH





MOBILE MARKET BY THE NUMBERS

PACE OF CHANGE



BY 2018...



850 M

PCs and tablets
subscriptions



3.3 BN

Smartphone
subscriptions



6.5 BN

Mobile broadband
subscriptions



9.3 BN

Mobile subscriptions

MOBILE SUBSCRIPTIONS Q4 2012

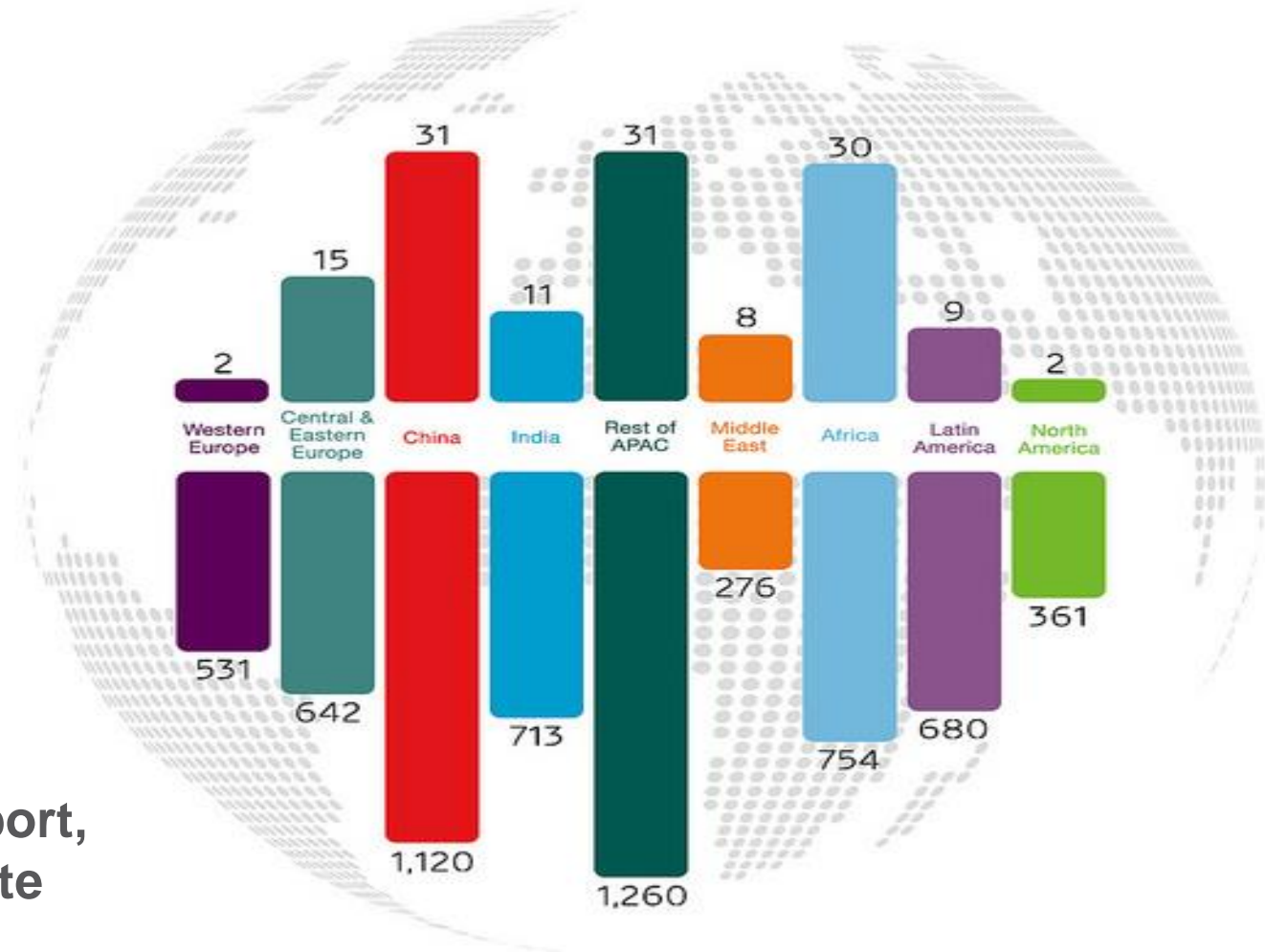


~ 6.3B

~ 140 M net additions

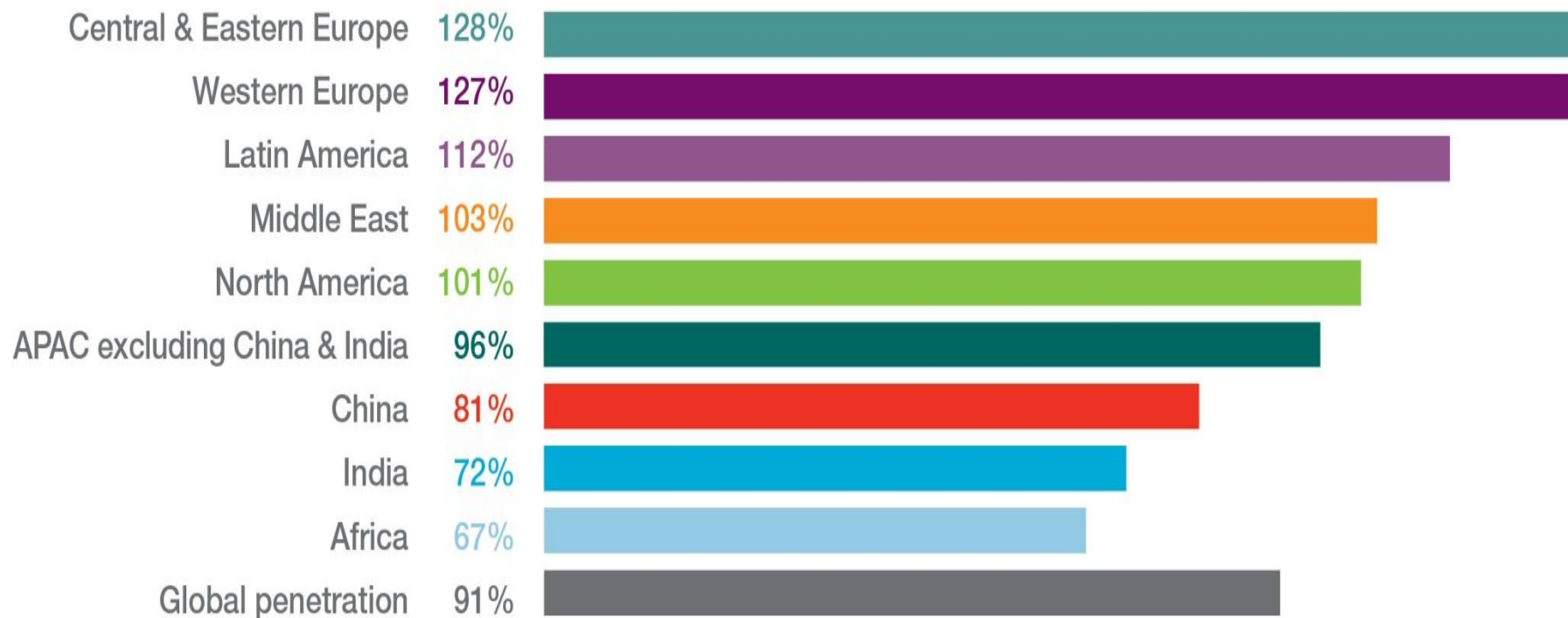
Source: Ericsson Mobility Report,
February 2013 Interim Update

NET ADDITIONS (MILLION)



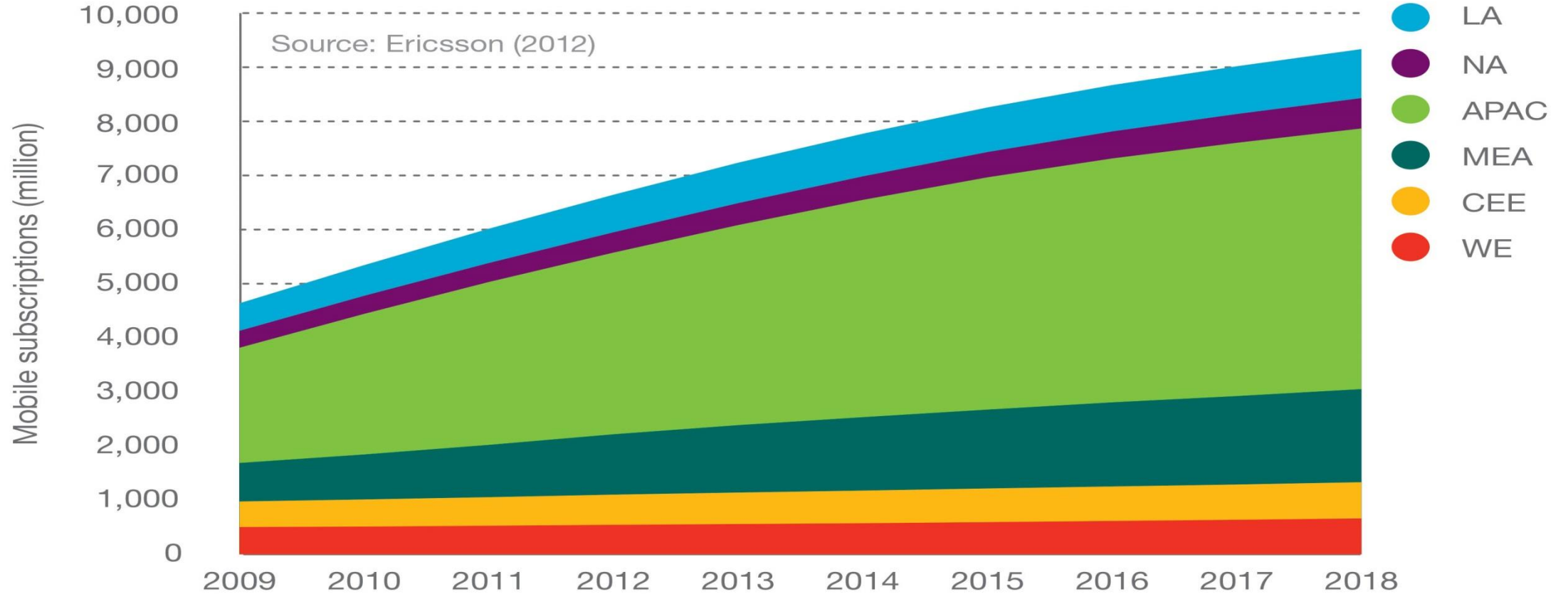
MOBILE SUBSCRIPTIONS (MILLION)

MOBILE PENETRATION PERCENTAGE Q3 2012



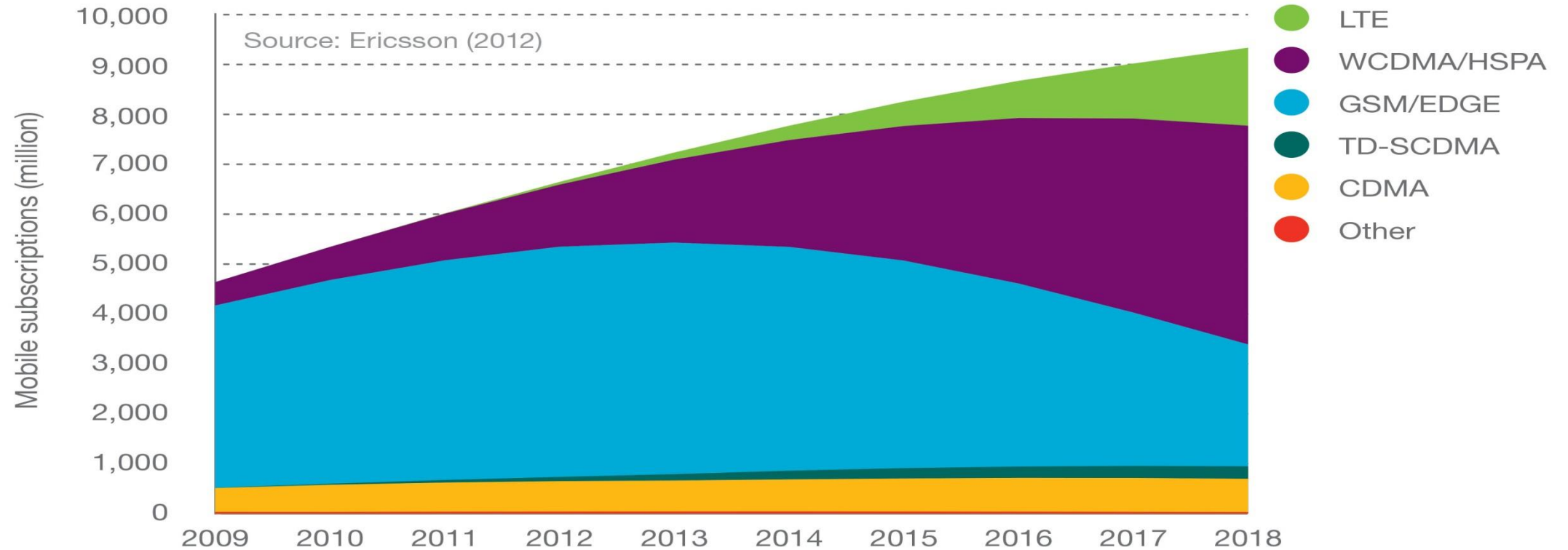
Source: Ericsson (November 2012)

MOBILE SUBSCRIPTIONS BY REGION, 2009-2018



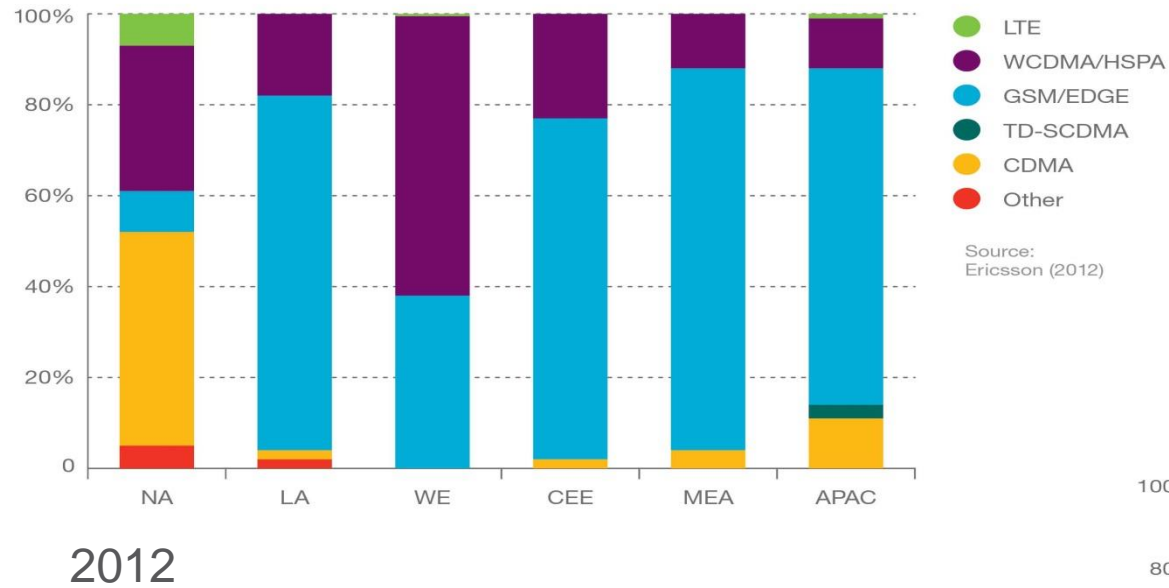
M2M subscriptions not included

MOBILE SUBSCRIPTIONS BY TECHNOLOGY, 2009-2018

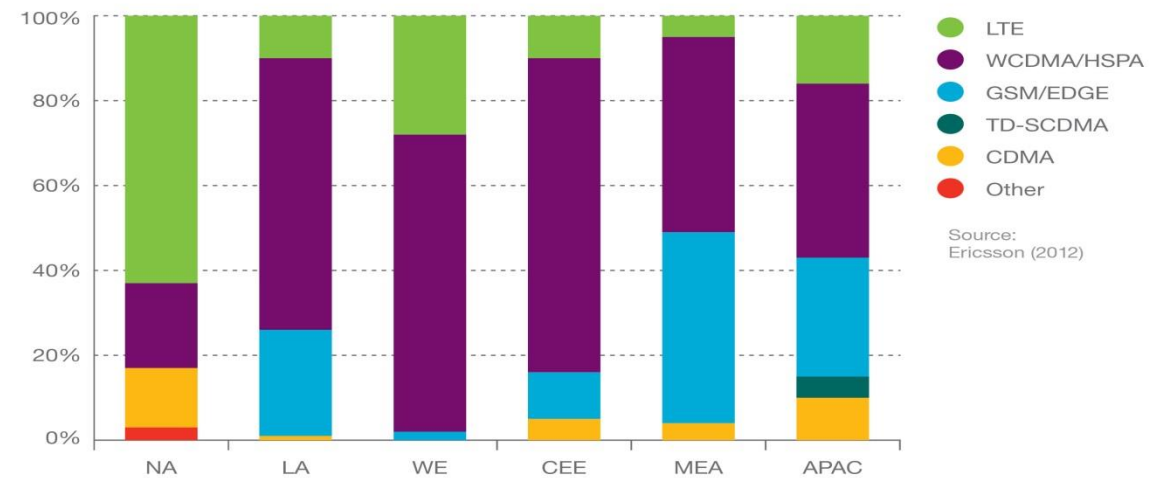


M2M subscriptions not included

SUBSCRIPTIONS BY TECHNOLOGY & REGION, 2012 & 2018



2018

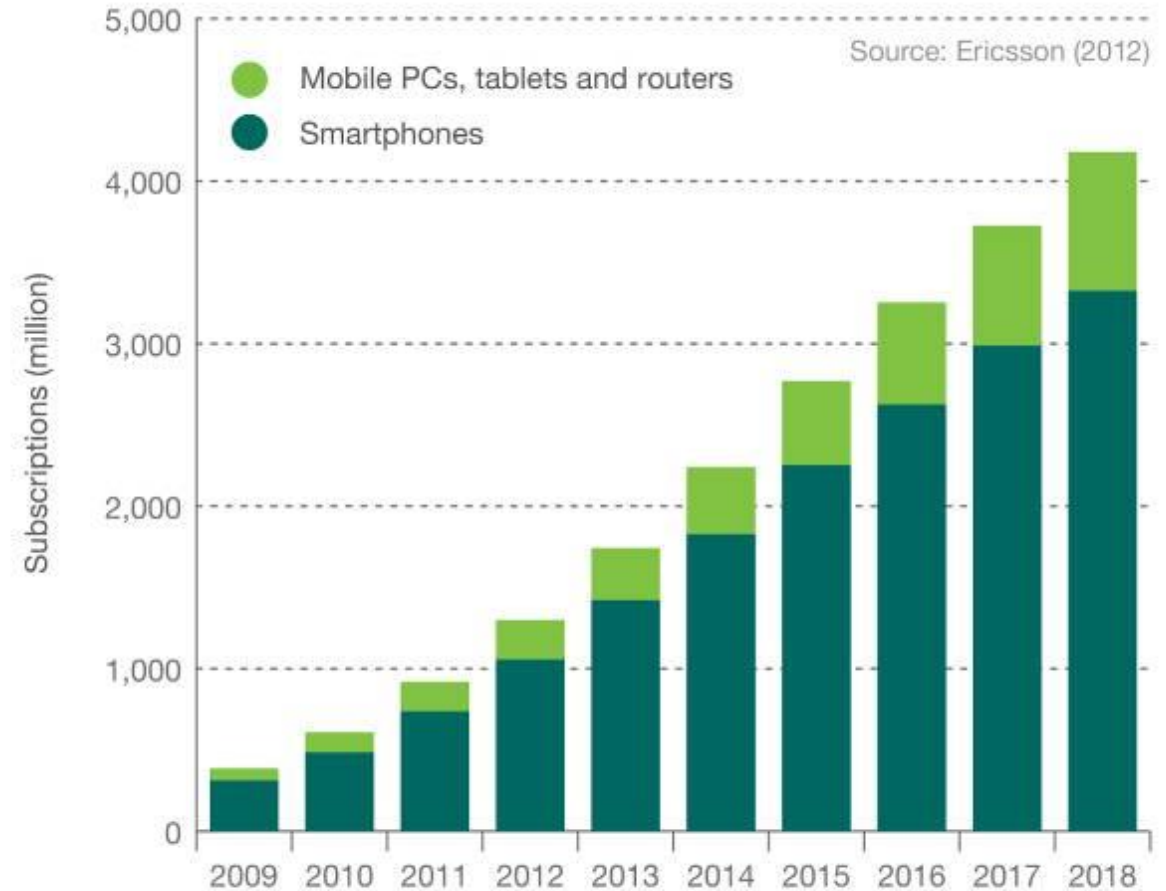


SMARTPHONE GROWTH

- › 40% of phones sold during 2012 were smartphones
- › 3.3 B Smartphone subscriptions by the end of 2018

14X

MOBILE DATA TRAFFIC FOR SMARTPHONES WILL GROW ~14 TIMES BETWEEN 2012 AND 2018



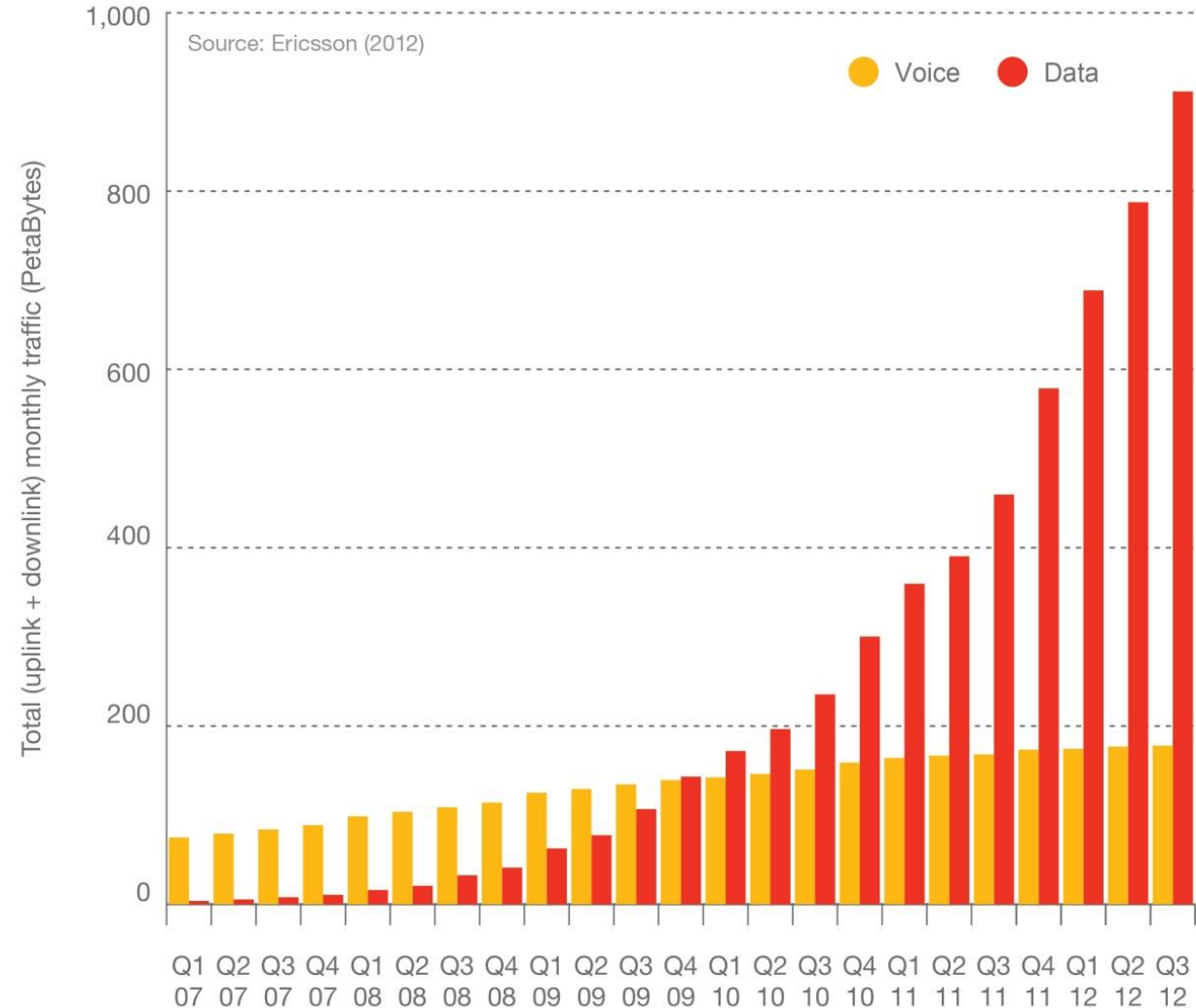
MOBILE TRAFFIC UPDATE



2X

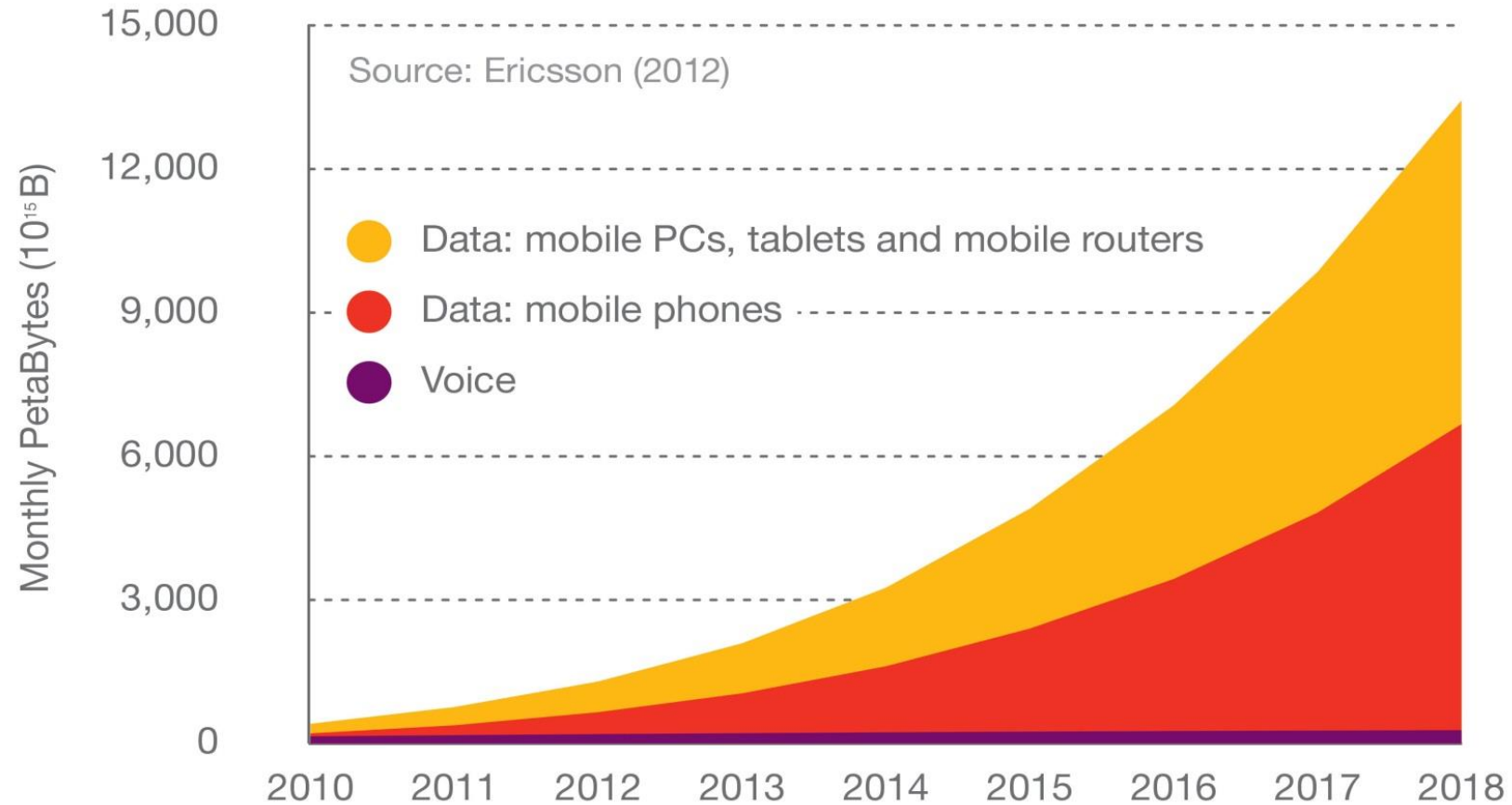
MOBILE DATA TRAFFIC
DOUBLED BETWEEN
Q3 2011 AND Q3 2012

Based on actual
measurements



DVB-H, Wi-Fi, and Mobile WiMax not included

14 TIMES MOBILE DATA TRAFFIC BY END OF 2018



MARKET TRENDS 2013



1

Everything gets connected and smart, not just phones

2

Expansion into digital services to find new revenues

3

Tiered, shared, bundled and real-time pricing models

4

Customer experience driving operator transformation

5

Differentiation through superior network performance and quality



1

Everything gets connected and smart, not just phones

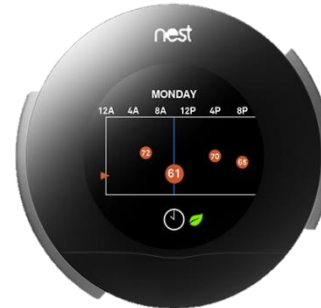


40%

OF ALL PHONES SOLD DURING 2012 WERE SMARTPHONES

% OF GLOBAL USER BASE WITH SMARTPHONES

15%



Volvo Is Bringing Spotify to the Car



Connected vehicle cloud



AT&T
digital*life*



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Financial Services

M2M

Advertising

eHealth

Video & Media

Security

Cloud

Applications

Digital Services

Telefónica Digital is focused on bringing innovative products and services to market globally across eight key sectors:

Financial Services

Digital wallets, digital remittances, micro credits & insurance

M2M

Transport, utilities, smart industry, smart cities

Advertising

Mobile advertising, location-based services, loyalty schemes/offers

eHealth

Remote patient monitoring, tele-consultation, tele-care, demand and access management

Video & Media

IPTV, OTT video, CDNs, Terra

Security

Managed security services, clean pipes, mobile & PC security

Cloud

Virtual data centres, SaaS, BPaaS

Applications

BlueVia, WAC

3

Tiered, shared, bundled and real-time pricing models



Source: <http://tigo.com.co/node/1721>



Package Turbo Button		Price	Short Code Activation	Keyword	Validity
Turbo Button		\$ 2,500	203	day	To 23:59 on the date of purchase

COP 2,500 = 1.39 USD

Easy SMS based activation

STEP 1: Choose your AT&T Mobile Share Plan	Per Month					
	1GB	4GB	6GB	10GB	15GB	20GB
Mobile Share with Unlimited Talk & Text	\$40	\$70	\$90	\$120	\$160	\$200
	+	+	+	+	+	+
Each Smartphone*	\$45	\$40	\$35	\$30	\$30	\$30

Pocket Buddies

Unlimited internet and lots of SMS**



Get the 'Aircel Pocket Buddies' recharge today and indulge in unlimited internet and lots of SMS*. Now stay connected with your friends and family all the time, and take them wherever you go.

Price (Rs.)	22	88	128	198
2G Data*	Unlimited	Unlimited	Unlimited	Unlimited
3G Data**	100 MB	250 MB	500 MB	1 GB
High Speed Up to	Up to 3.6Mbps			
SMS Local/National#	600	3000	6000	6000
Validity (Days)	3	15	30	30

4

Customer experience driving operator transformation

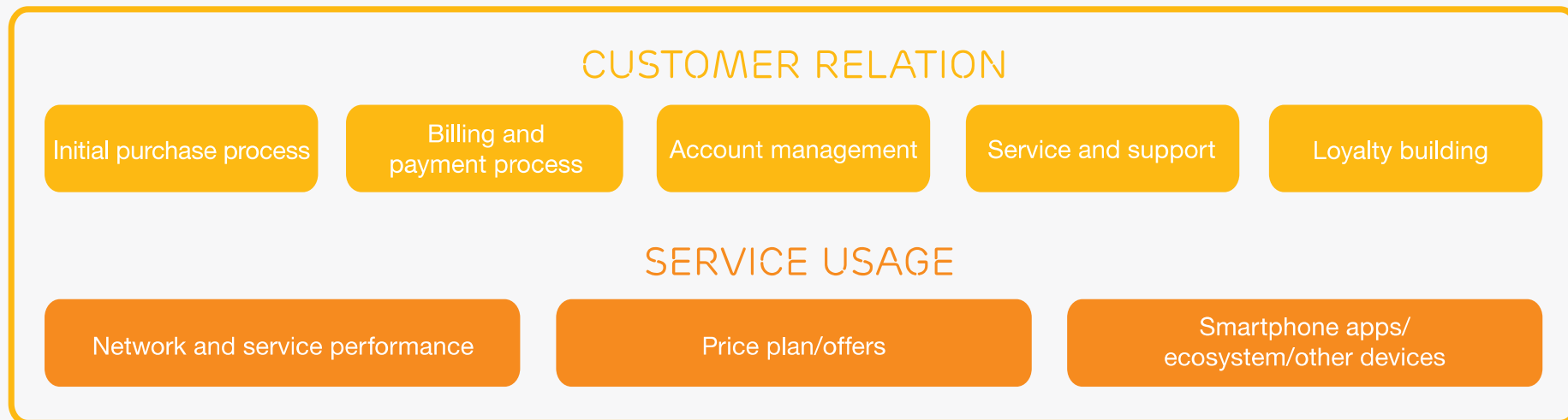


Figure 2: Global mobile operator satisfaction levels

Source: Ericsson ConsumerLab Analytical Platform 2012
Study base: Mobile phone users



Figure 3: Elements that make up the consumer experience



Source: Ericsson ConsumerLab 2012

5

Differentiation through superior network performance and quality



4G LTE AMERICA'S FASTEST 4G NETWORK.

SEND ME UPDATES

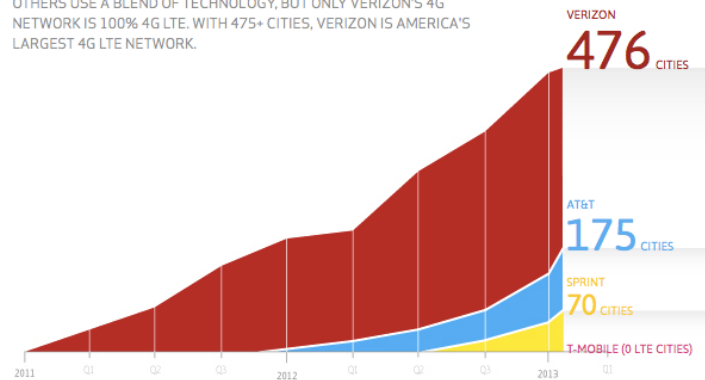
EXPLORE 4G LTE COVERAGE DEVICES

IT'S AN EASY CHOICE
CHECK OUT HOW VERIZON 4G LTE STACKS UP TO THE OTHER CARRIERS.
[SEE THE DIFFERENCE](#)

SEE HOW VERIZON 4G LTE STACKS UP TO THE OTHER CARRIERS.

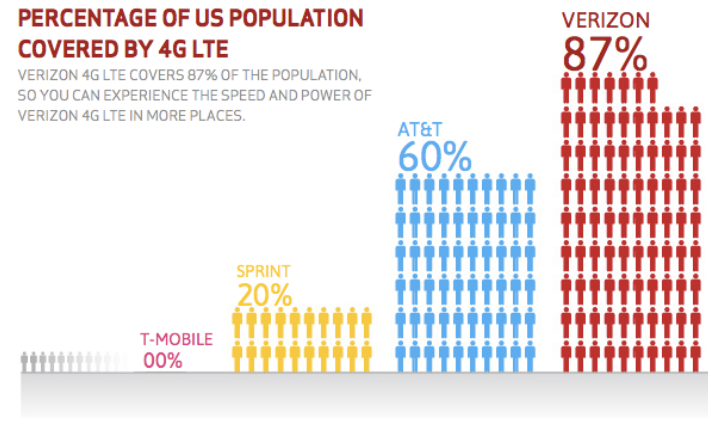
4G LTE CITIES BY CARRIER

OTHERS USE A BLEND OF TECHNOLOGY, BUT ONLY VERIZON'S 4G NETWORK IS 100% 4G LTE. WITH 475+ CITIES, VERIZON IS AMERICA'S LARGEST 4G LTE NETWORK.



PERCENTAGE OF US POPULATION COVERED BY 4G LTE

VERIZON 4G LTE COVERS 87% OF THE POPULATION, SO YOU CAN EXPERIENCE THE SPEED AND POWER OF VERIZON 4G LTE IN MORE PLACES.



NETWORK PERFORMANCE MATTERS



How likely are you to stay...?

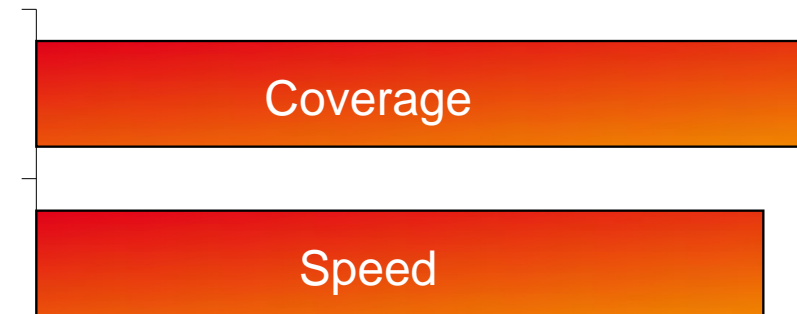
Users with Medium NW satisfaction



Users with High NW satisfaction

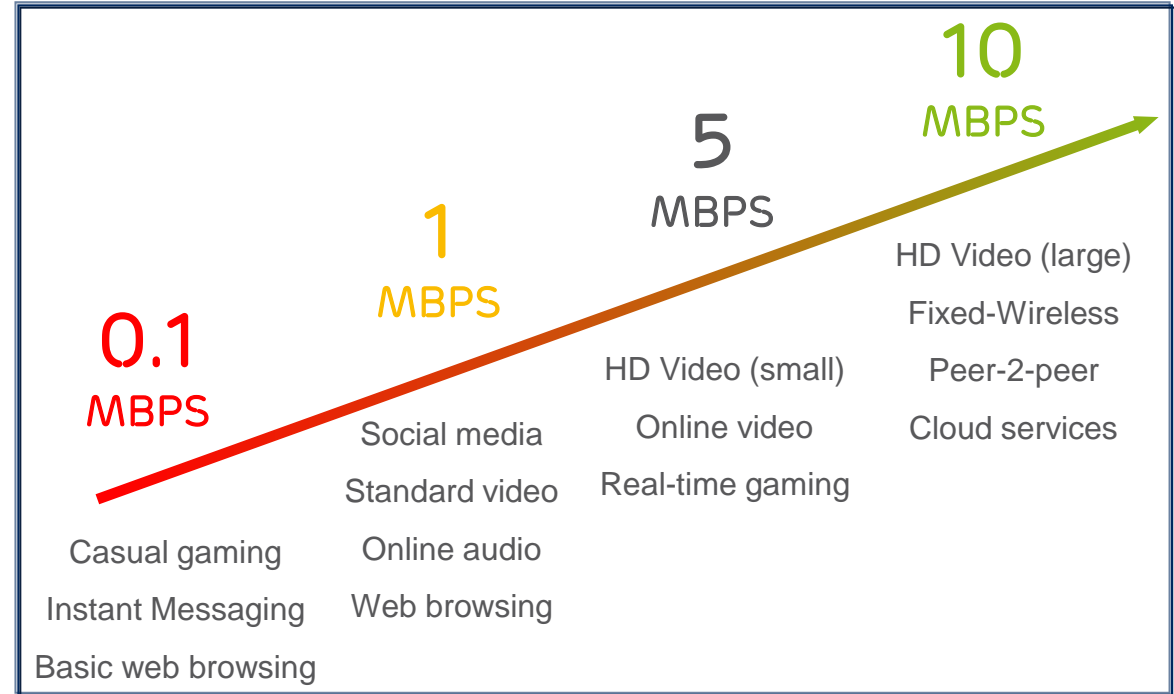
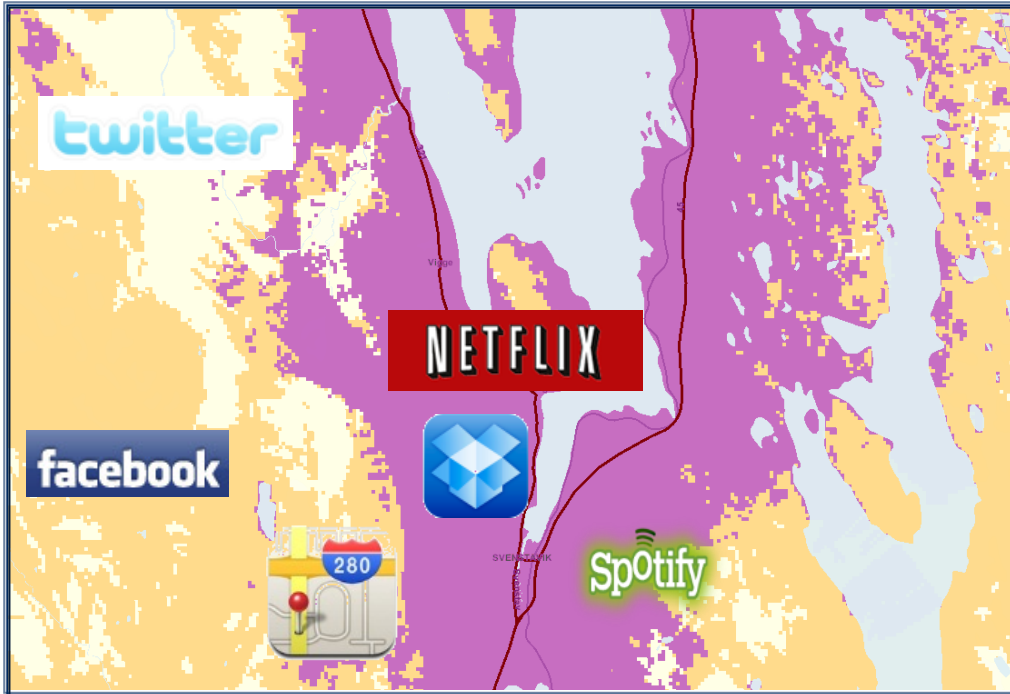


Top NW satisfaction drivers:



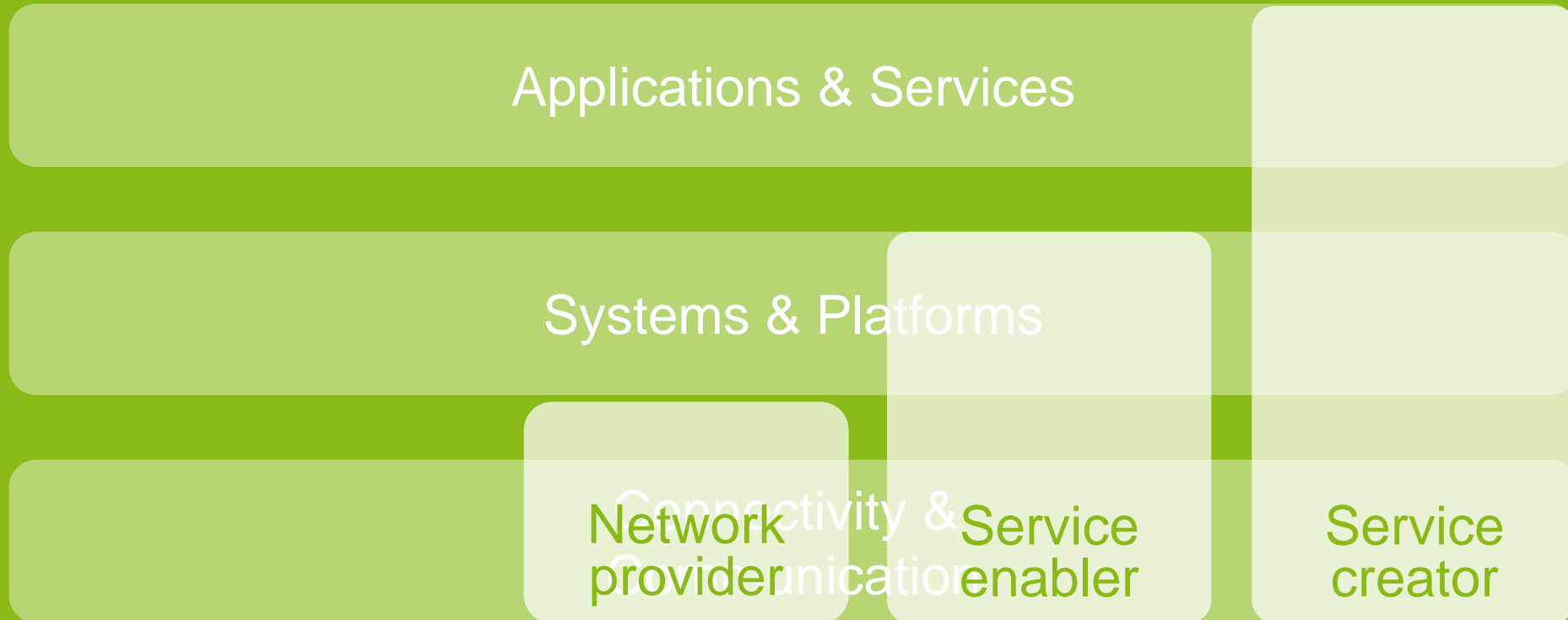
RETHINK COVERAGE

FROM VOICE TO APPS



APP coverage changes things

OPERATORS RE-THINK



RECAP OF MARKET TRENDS



- › Technology Innovation energy is high – mobility, broadband, cloud
- › Business Models are stressed – experimentation ongoing
- › Consumer Experience in focus – pull effect for innovation
- › Multiple evolution options exist – multiple capabilities needed
- › Exciting times ahead!



MAKING SENSE OF IT ALL: THE NETWORKED SOCIETY

ON THE BRINK OF A NETWORKED SOCIETY



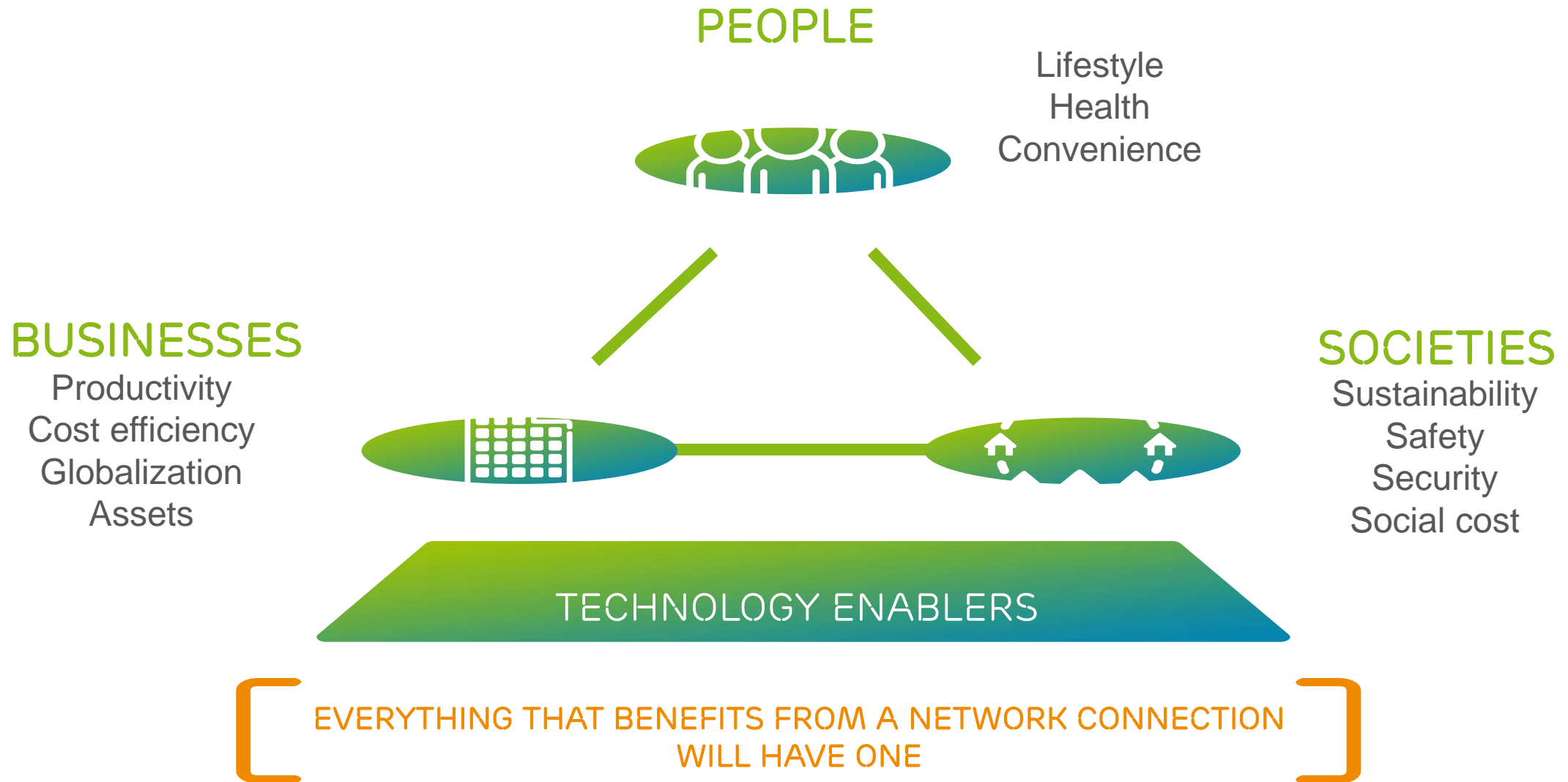
When one person connects,
their world changes.

With everything connected,
our world changes.

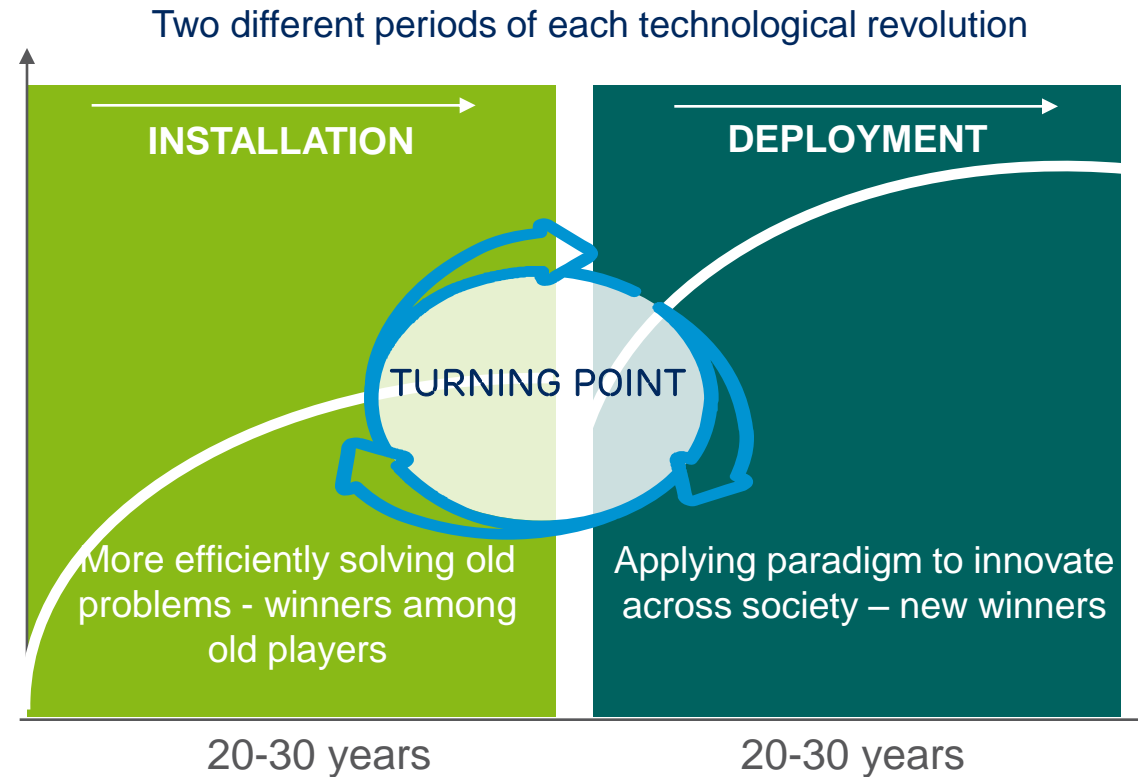
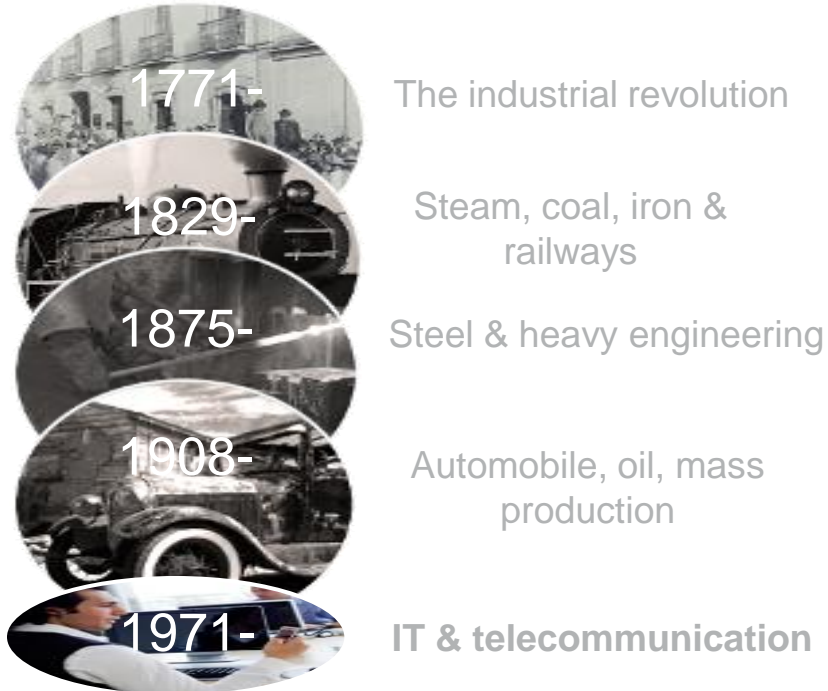


NETWORKED
SOCIETY

IMPACT OF A NETWORKED SOCIETY



PHASES OF THE NETWORKED SOCIETY



NOT EVERY GEOGRAPHY MOVING INTO THE DEPLOYMENT PHASE AT THE SAME PACE

Source: Professor Carlota Perez
Universities of Cambridge, Tallinn and Sussex

MANAGING TRAFFIC GROWTH



Spectrum

Technology

Densification

SPECTRUM: LIFEBLOOD OF MOBILE

Different Regulatory Approaches

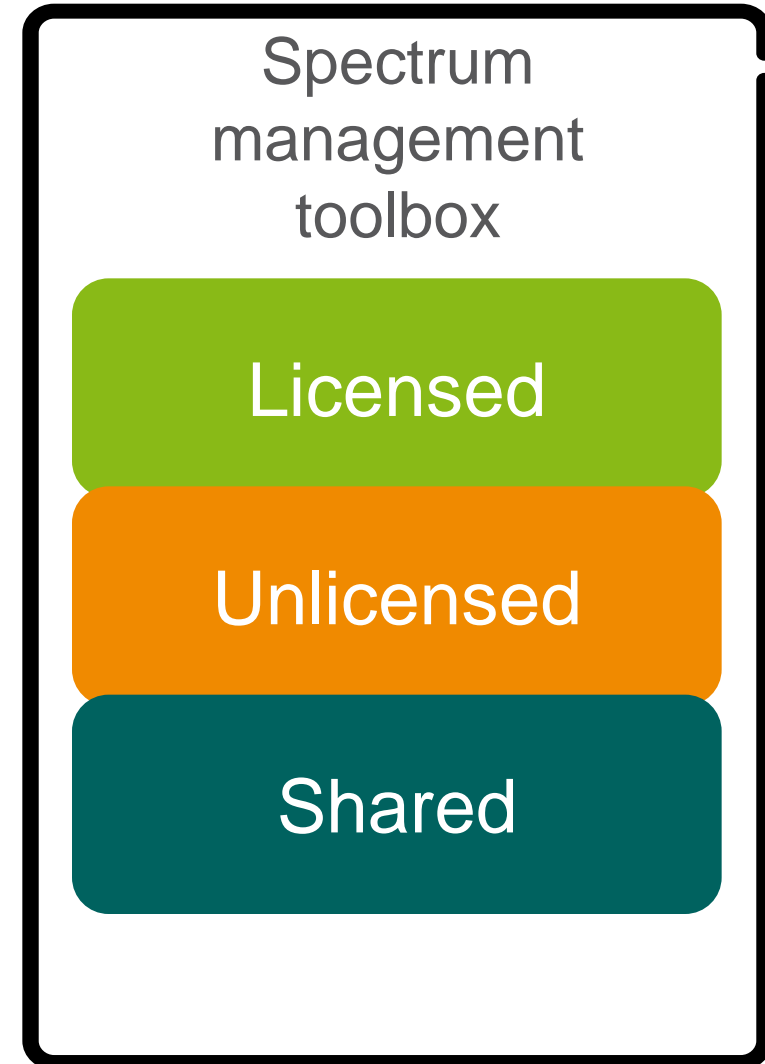


Licensed – large area, QoS

Unlicensed – small area, best effort

Licensed shared access

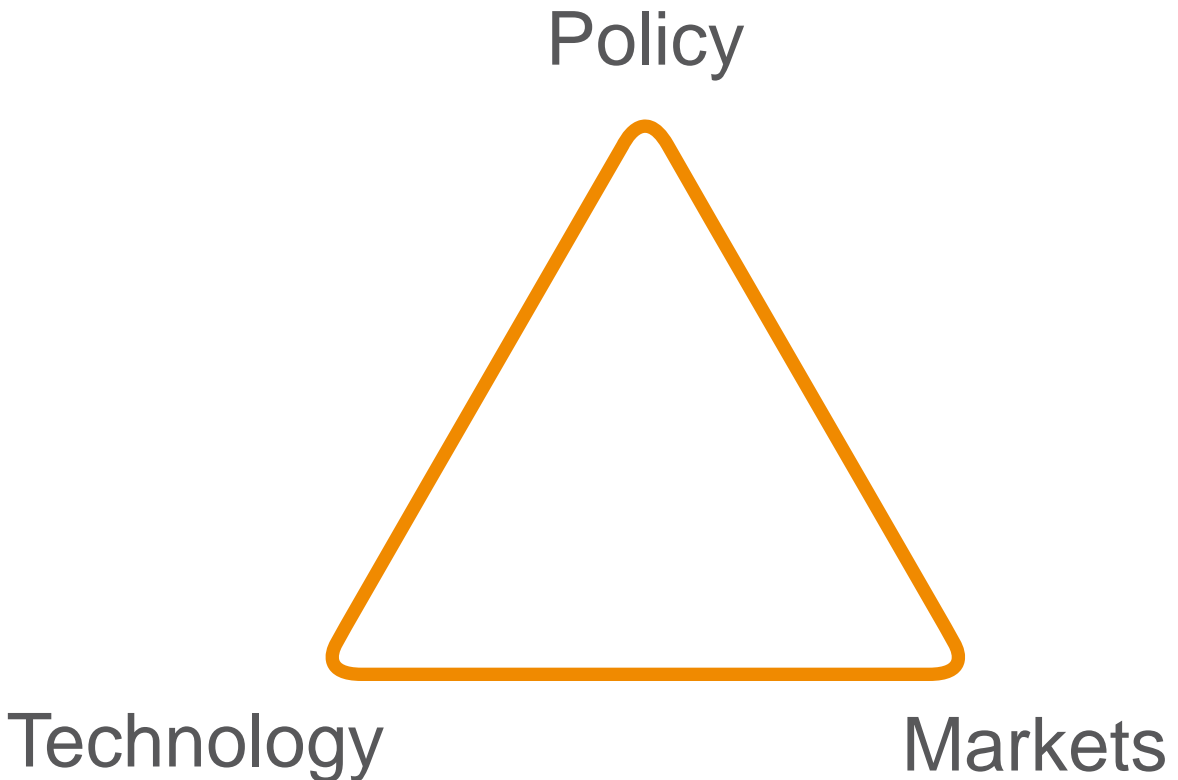
ASA/LSA authorized-licensed shared access
for mobile broadband in under-used spectrum



IMPLICATIONS FOR POLICY



- › To exploit scale (and scope), harmonize spectrum



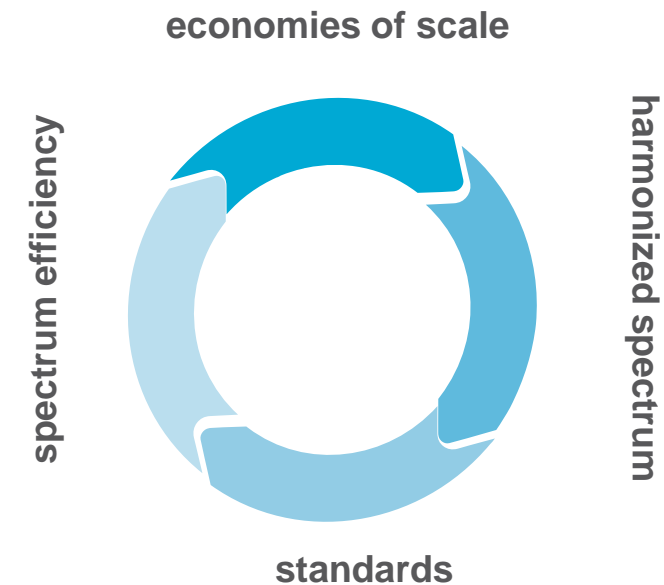
MUTUAL INTERDEPENDENCE

HARMONIZED SPECTRUM



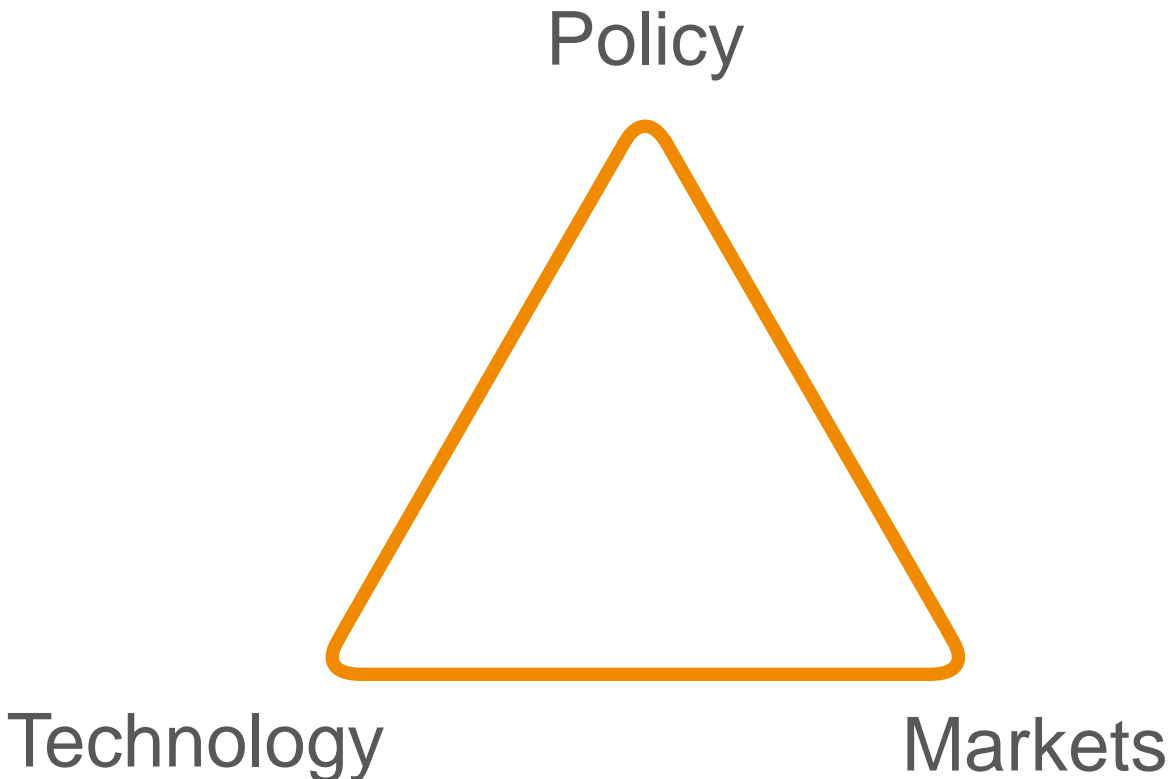
Harmonized spectrum is key for affordable MBB access as well as for successful realization of national policy goals based on **standardized products** operating in **licensed spectrum**

- › **Economies of scale** (based on a mass market)
- › **Easy cross-border coordination**
- › **Cross-border operation** (between countries)
- › **Global roaming** capabilities
- › **Interoperability** choice and convenience
- › **Efficient use** of spectrum (also in border areas)



Providing affordable services and applications for all

IMPLICATIONS FOR POLICY



MUTUAL INTERDEPENDENCE

- To exploit scale (and scope), harmonize spectrum
- Policy players must seek to provide regulatory certainty
- Recognize & govern telecom as critical social infrastructure, not a mere vertical industry
- Not a cow to be milked, but a horse that will drive the buggy of the economy

- 
- **RETHINK** the opportunity
 - **REALIZE** the potential to unleash digital vitalities of African/Maghreb economies
 - Key moment in history and a golden opportunity to light up Africa!



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