

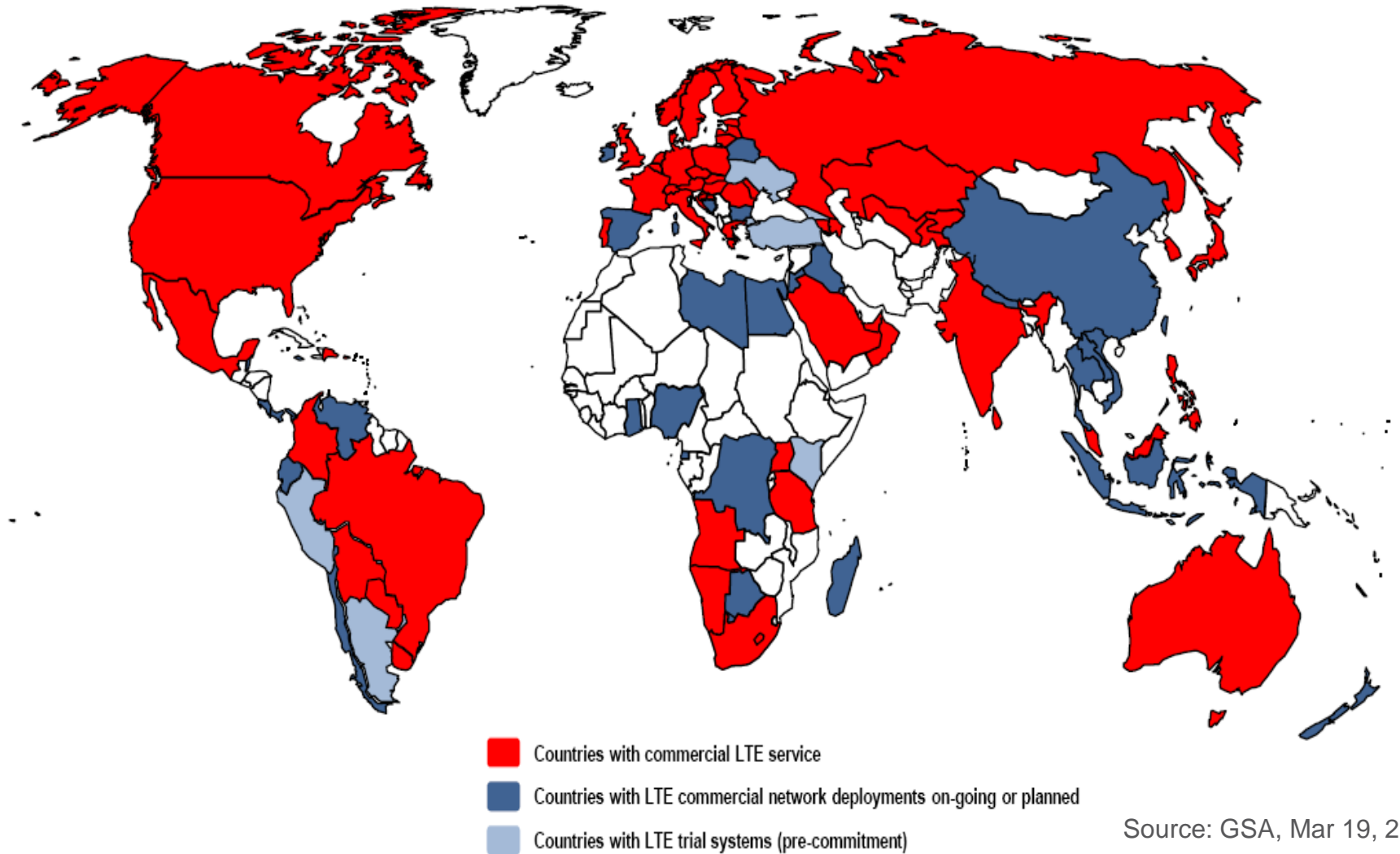


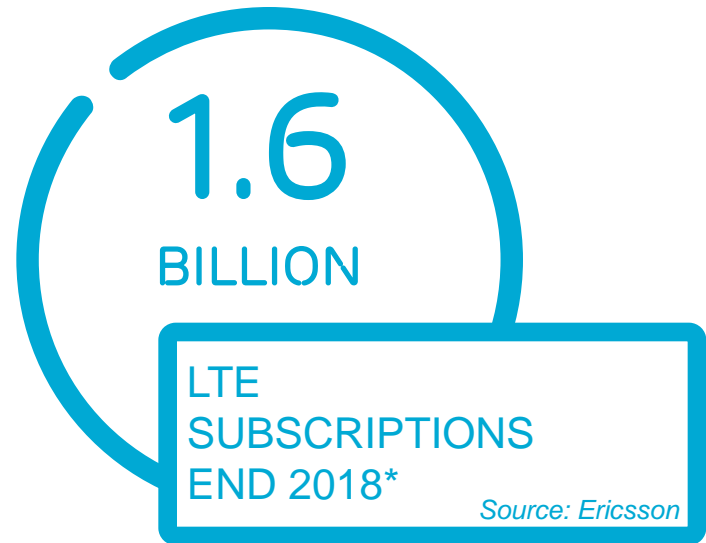
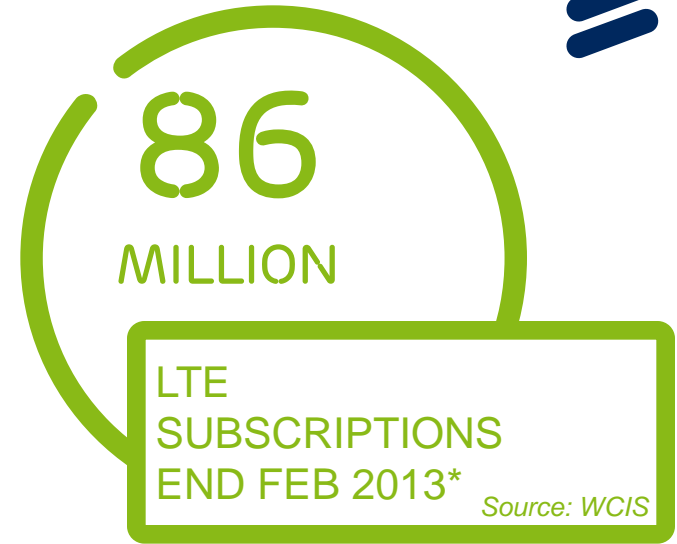
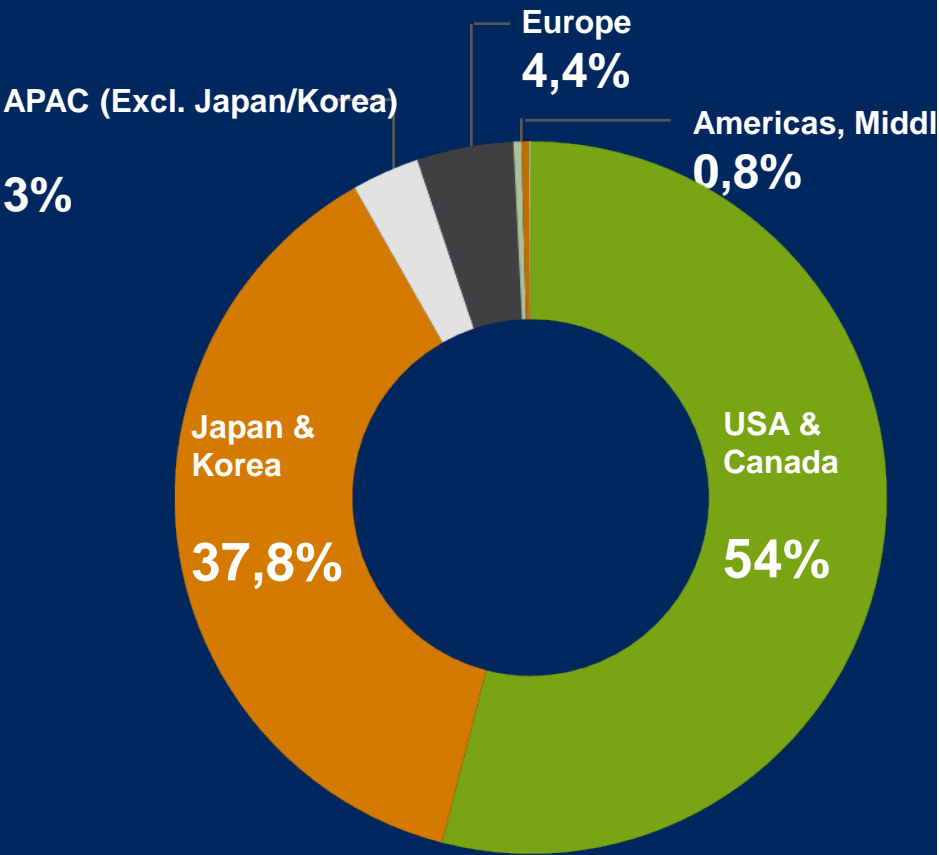
ERICSSON

LTE- THE ART OF THE POSSIBLE

Lars Bergendahl, LTE Program Director

156 LTE NETWORKS LAUNCHED IN 67 COUNTRIES - ON 6 CONTINENTS



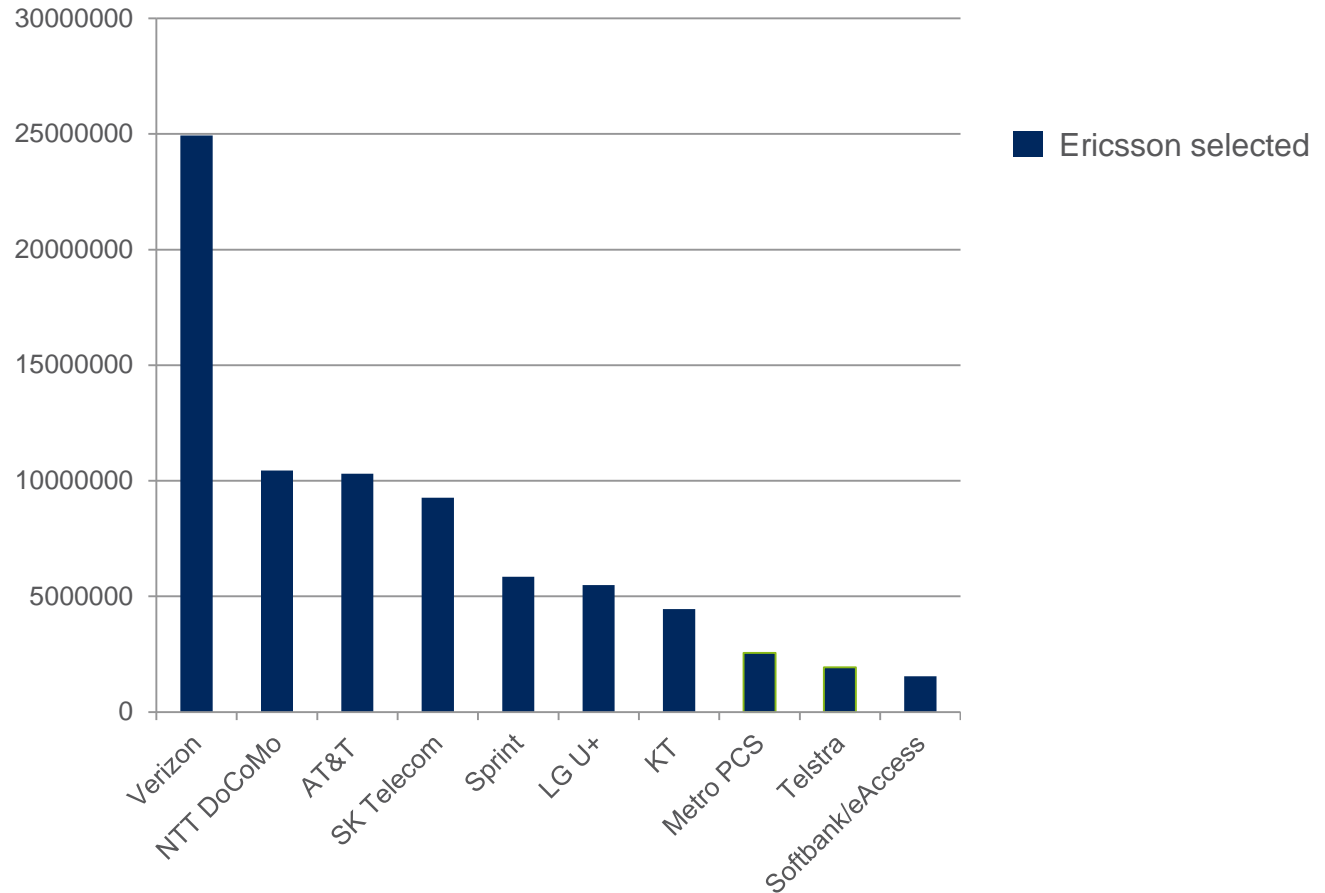


TOP 10 LTE OPERATORS IN Q1, 2013 BY SUBSCRIPTIONS



50%
LTE
TRAFFIC
SERVED BY
ERICSSON
NETWORKS

2X MORE
THAN #2



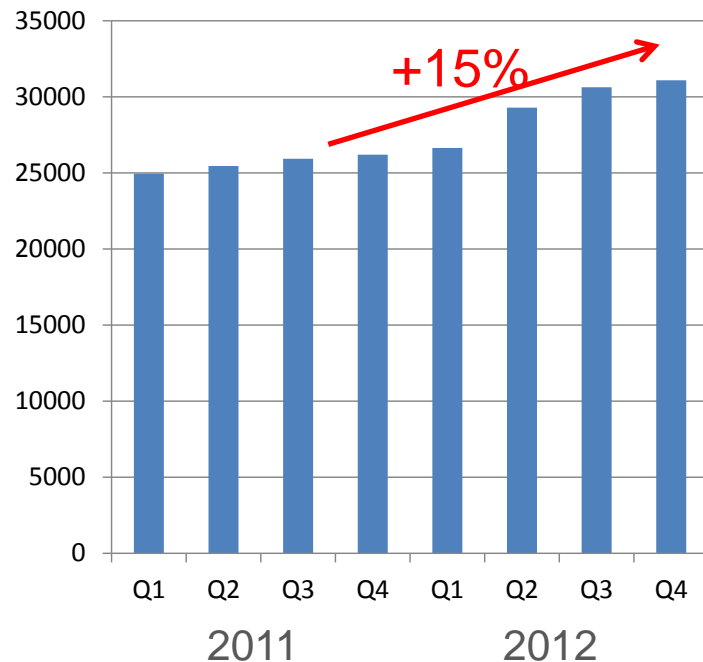
Ericsson present in high traffic markets and powers the top10 LTE operators' live networks

LGU+

A LTE SUCCESS STORY



Service ARPU Trend [Korean Won]



- › Subs +6.8%, coverage advantage
- › 43% subs migrated to LTE
- › 10% of LTE subs using VoLTE
- › ARPU: +15% YoY
- › Transition from Unlimited to Tiered

ECO SYSTEM



› Over 20 bands supported e2e

› FDD & TDD Combined



› LTE Bands on device



– 2010: 1 band

– 2011: 3 bands

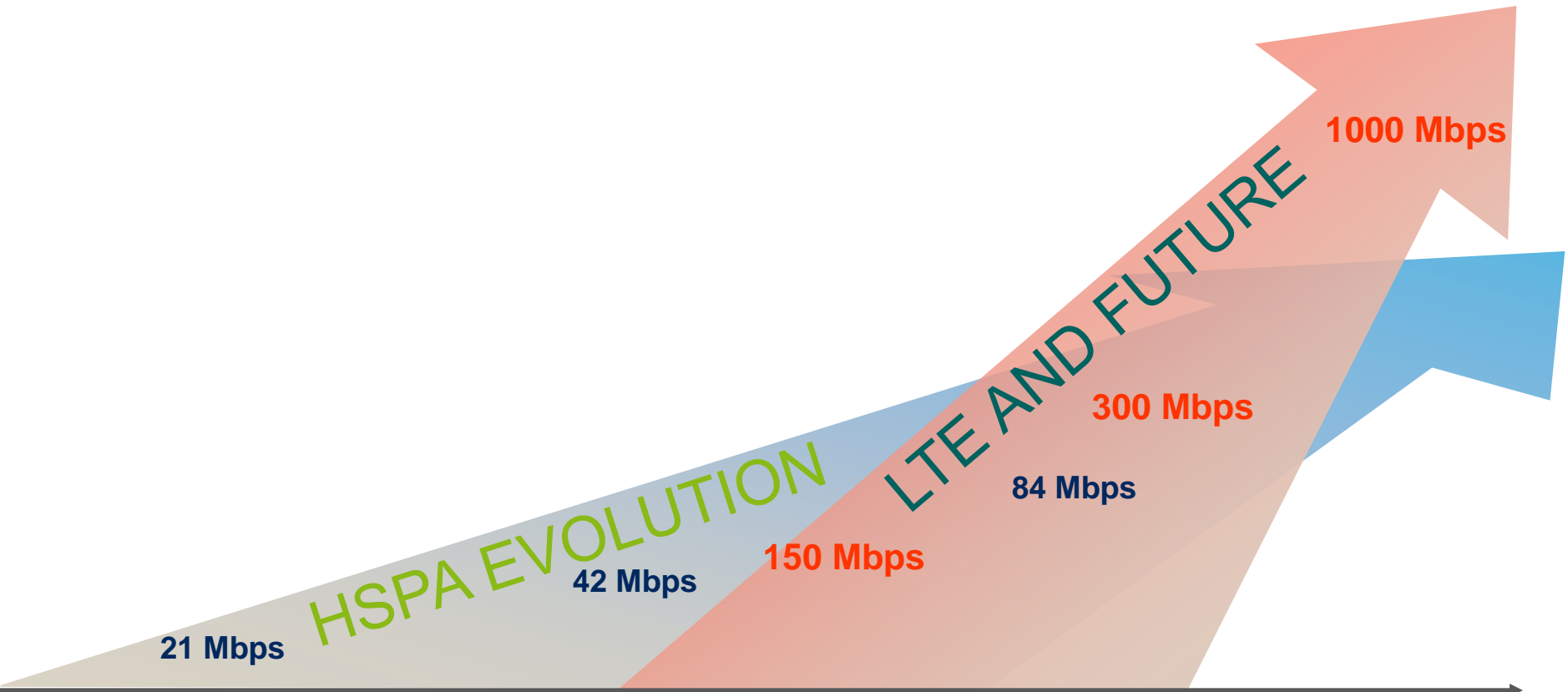
– 2012: 5 bands

– 2013: 6 and more

– 2014: 12-20 bands

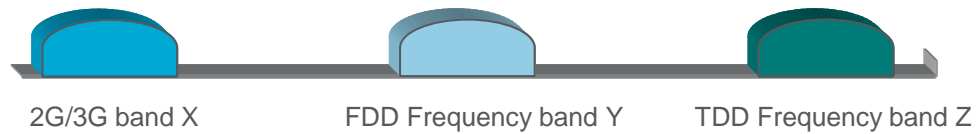
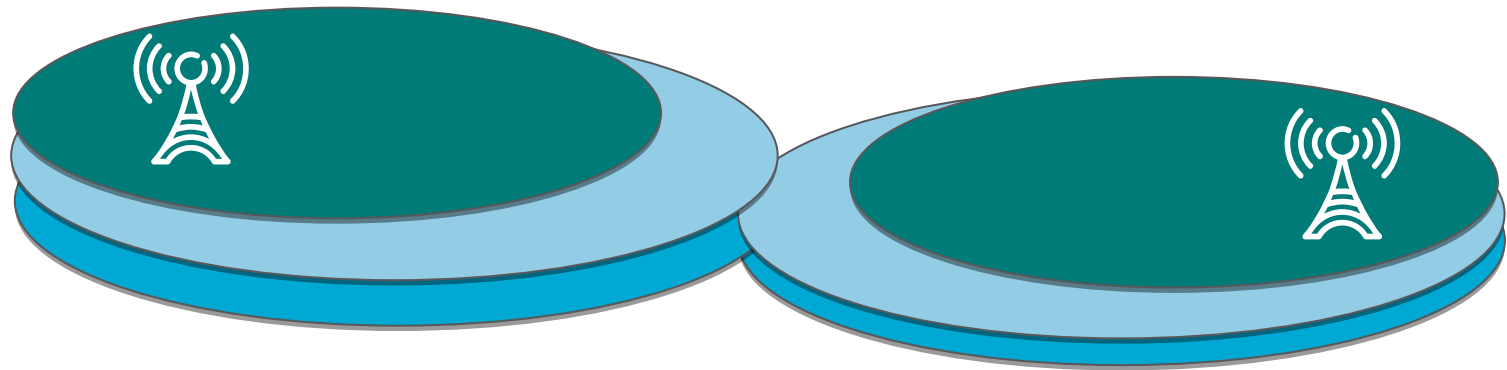


EVOLUTION OF MOBILE BROADBAND



Market impact	2013	~2016
Peak rate	~150 Mbps	~1000 Mbps
Typical user rate downlink	10-100 Mbps	Operator dependent
Typical user rate uplink	5-50 Mbps	Operator dependent

LTE VISION



CARRIER AGGREGATION

LTE ADVANCED NOW COMMERCIAL

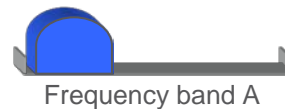


What is it?

Exploitation of fragmented spectrum to obtain higher bandwidth i.e. higher data rates

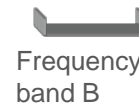
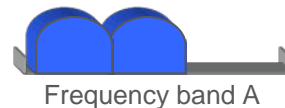
3GPP approved

Inter-band aggregation



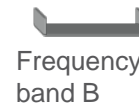
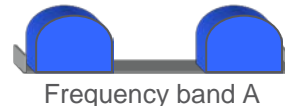
21 combinations +13 coming

Intra-band aggregation, contiguous component carriers



4 bands (+5 Release 12)

Intra-band aggregation, non-contiguous component carriers



(4 bands in Release 12)

FDD Commercial Launch Mid-2013

Frequency combinations driven by early customers

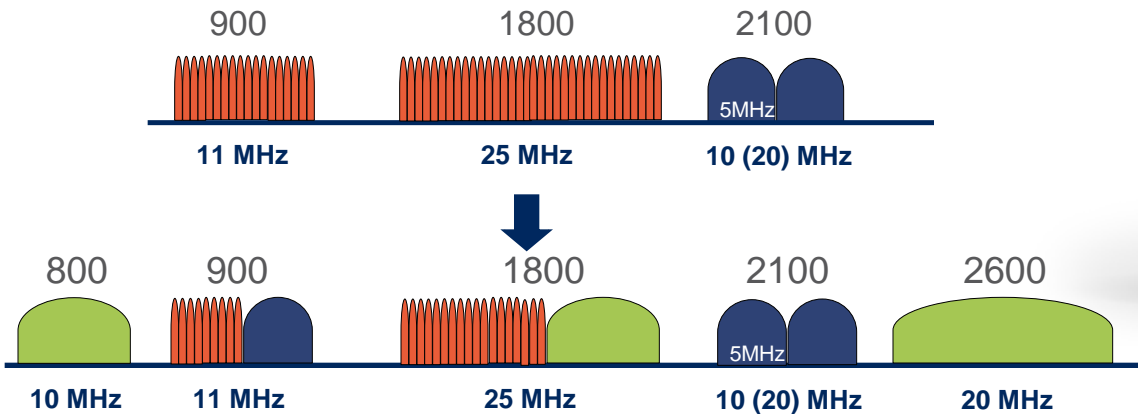
Up to total 20MHz initially, more to follow

CA EVOLUTION EUROPE

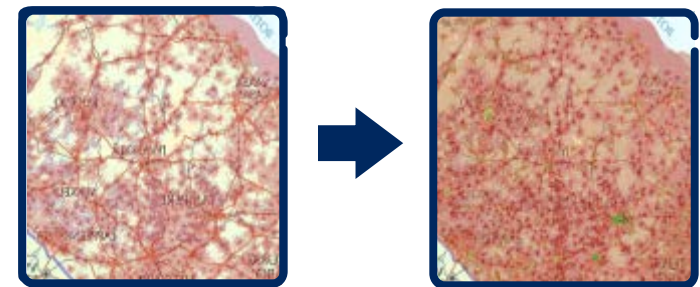


Spectrum Evolution

- GSM
- HSPA
- LTE



Mixed Mode eNodeB

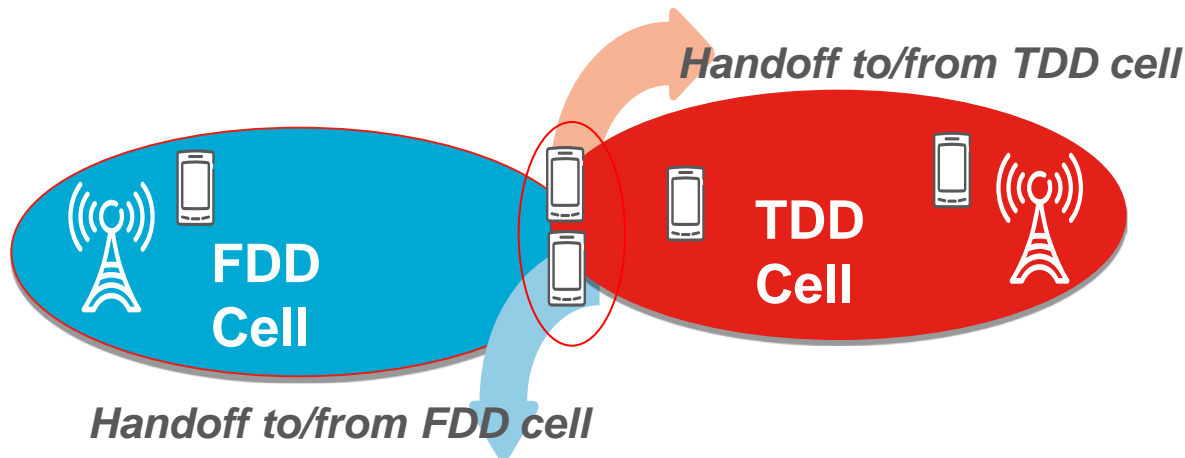


LTE TDD AND FDD INTERWORKING



FDD / TDD advantage

- › Mix and match available TDD / FDD spectrum
- › Add TDD for capacity
- › Load balance traffic across TDD and FDD cells
- › FDD-FDD and TDD-FDD handoff work the same



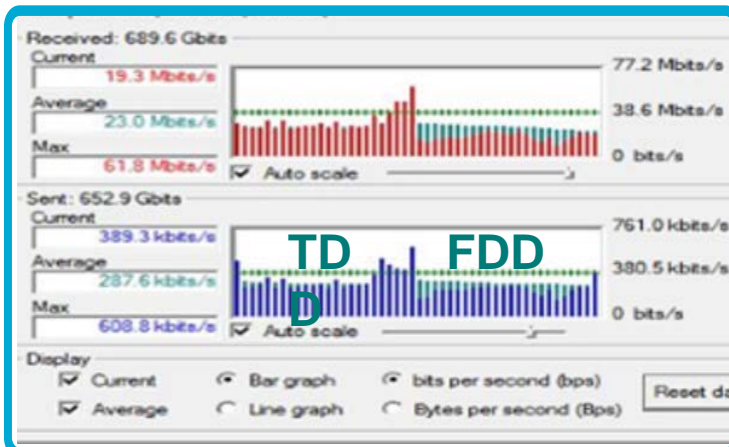
LTE TDD and FDD perform as a unified network

WORLD'S FIRST FDD/TDD NETWORK

CHINA MOBILE HK



FDD2600, TDD2300



Converged & seamless TDD / FDD solution
Commercially launched

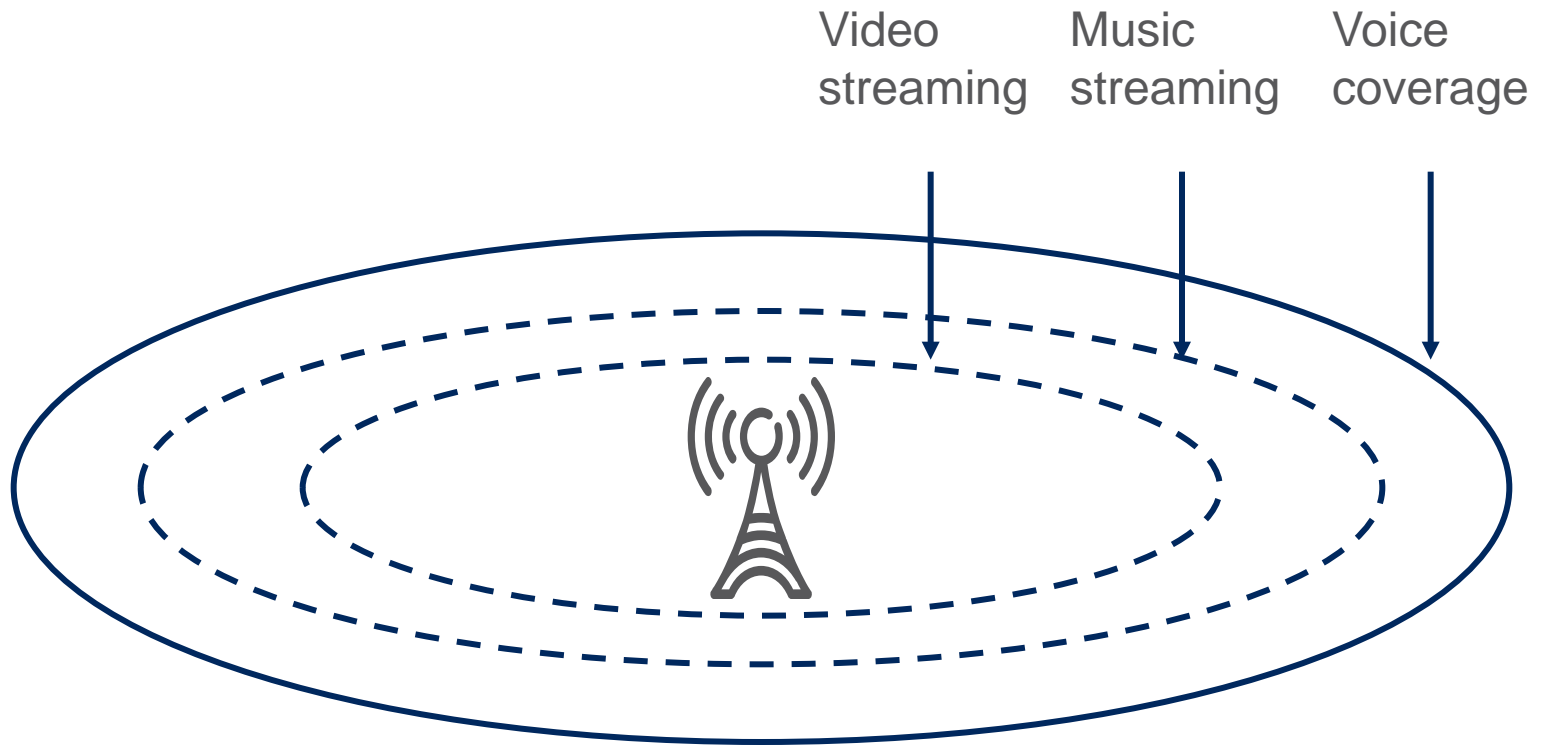
14 LTE TDD DEPLOYMENTS



Country	Operator	Frequency
Australia	NBN Co.	Band 40
Brazil	On Telecomunicacoes	Band 38
Brazil	Sky Brazil Services	Band 38
Hong Kong	China Mobile HK	Band 38
India	Bharti Airtel	Band 40
Japan	Softbank XGP/LTE TDD	Band 41
Oman	Omantel FDD and TDD	Band 40
Poland	Aero2 FDD and TDD	Band 38
Russia	MTS Moscow	Band 38
S. Arabia	Mobily	Band 38
S. Arabia	STC	Band 40
Sri Lanka	Dialog Axiata	Band 40
Sweden	3 Sweden FDD and TDD	Band 38
UK	UK Broadband	Band 42,43

Source: GSA, Mar 19, 2013

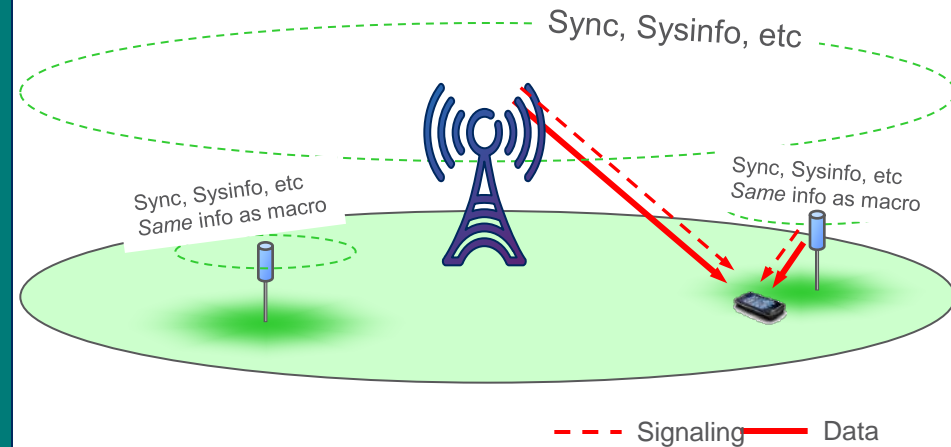
RETHINK COVERAGE



App Coverage: every app has its own coverage map

COMBINED CELL

- Small Cells no salvation on its own. Creates interference.
- Coverage boost
- Seamless Mobility – no handover within cell
- Efficient – small RRU transmits when needed
- Ericsson´s the world leading small cell SW provider.



Combined cell boosts system capacity and data rates with minimal interference

VOLTE LEADERSHIP

LARGE SCALE COMMERCIAL LAUNCH



HDTM VOICE



10% of LTE subs on VoLTE

99.9% service accessibility

<0.2% call drop rate

5 KEY HD VOICE NEEDS

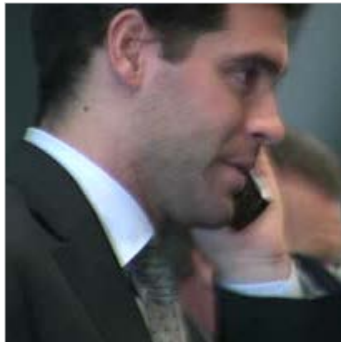


Sharing Feelings



Intimate and emotionally charged conversations with close friends and family

Doing Business



Daily professional dealings with colleagues, boss, clients, suppliers...

Social Networking



Connecting with family/social network to plan and organize encounters

Emergencies



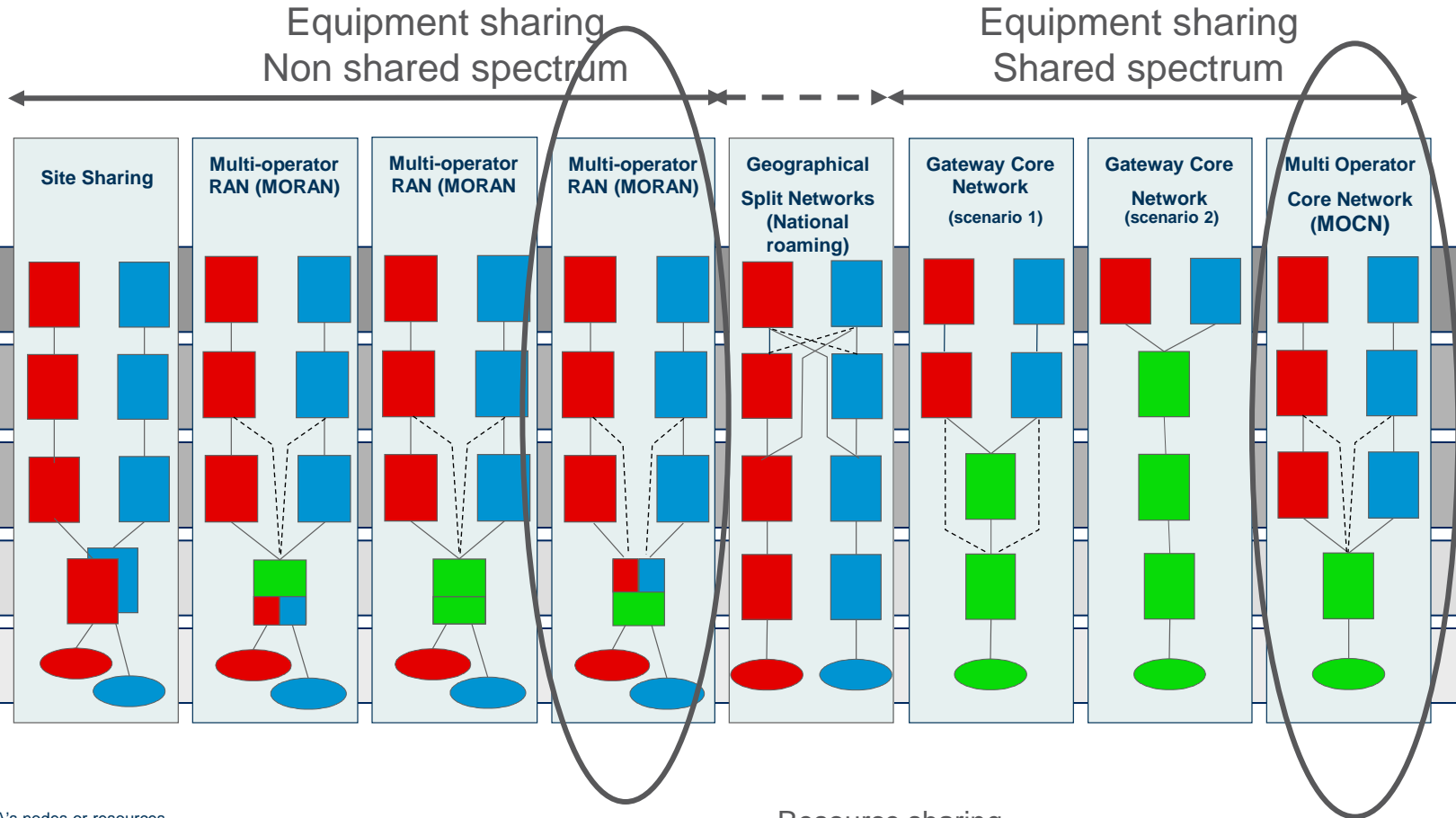
Managing and solving the unexpected minor crisis' in everyday life

Communicating Information



Transmitting and receiving daily "data" (dates, schedules, telephone numbers...)

SHARED NETWORKS LTE SCENARIOS

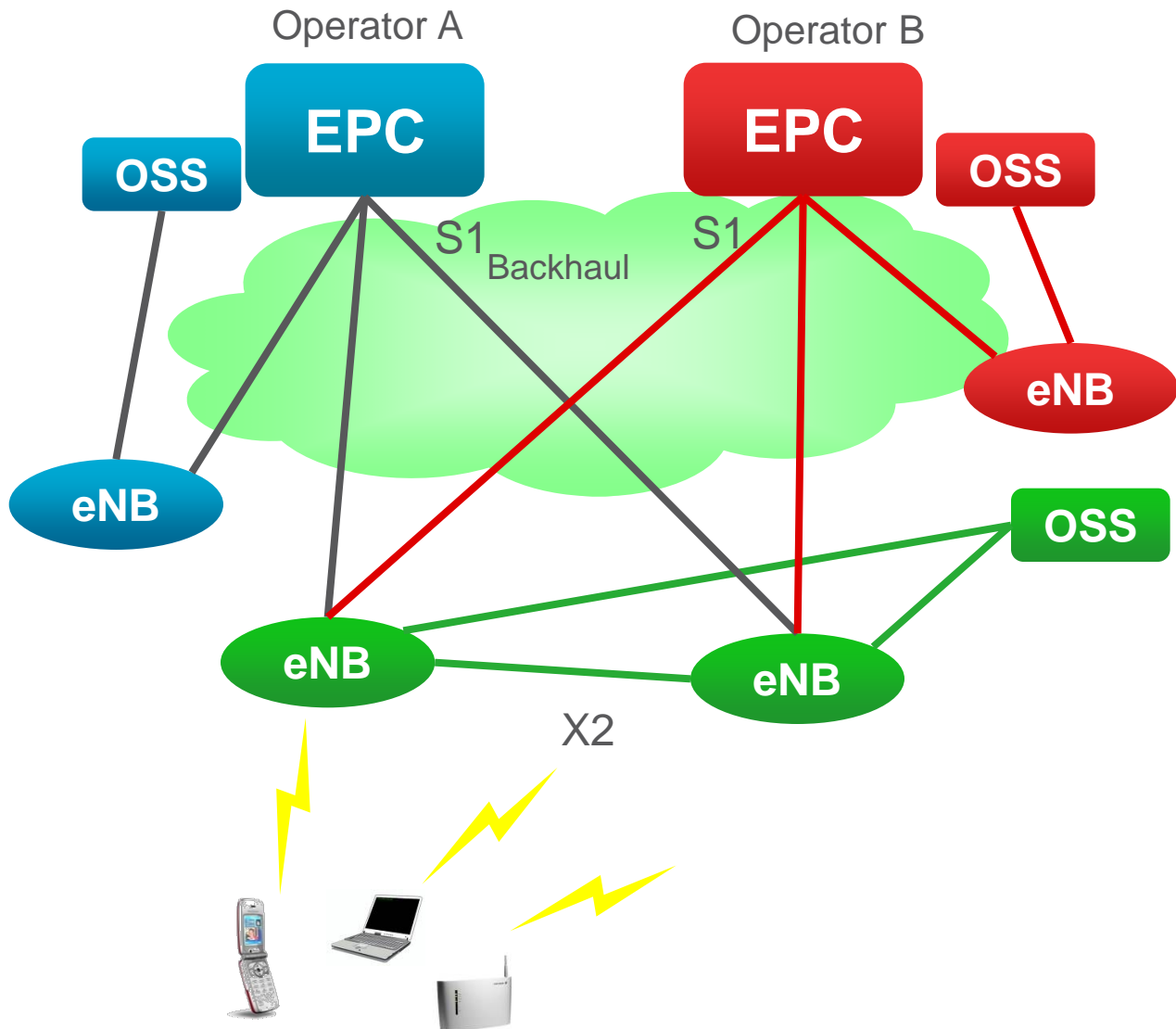





- Operator A's nodes or resources
- Operator B's nodes or resources
- Shared nodes and resources
- Control plane and User plane
- - - User plane only

Resource sharing

- Free: no guarantee
- Static: guaranteed but can be starved
- Dynamic: No starvation
- Free, minimum guarantee; QoS limits

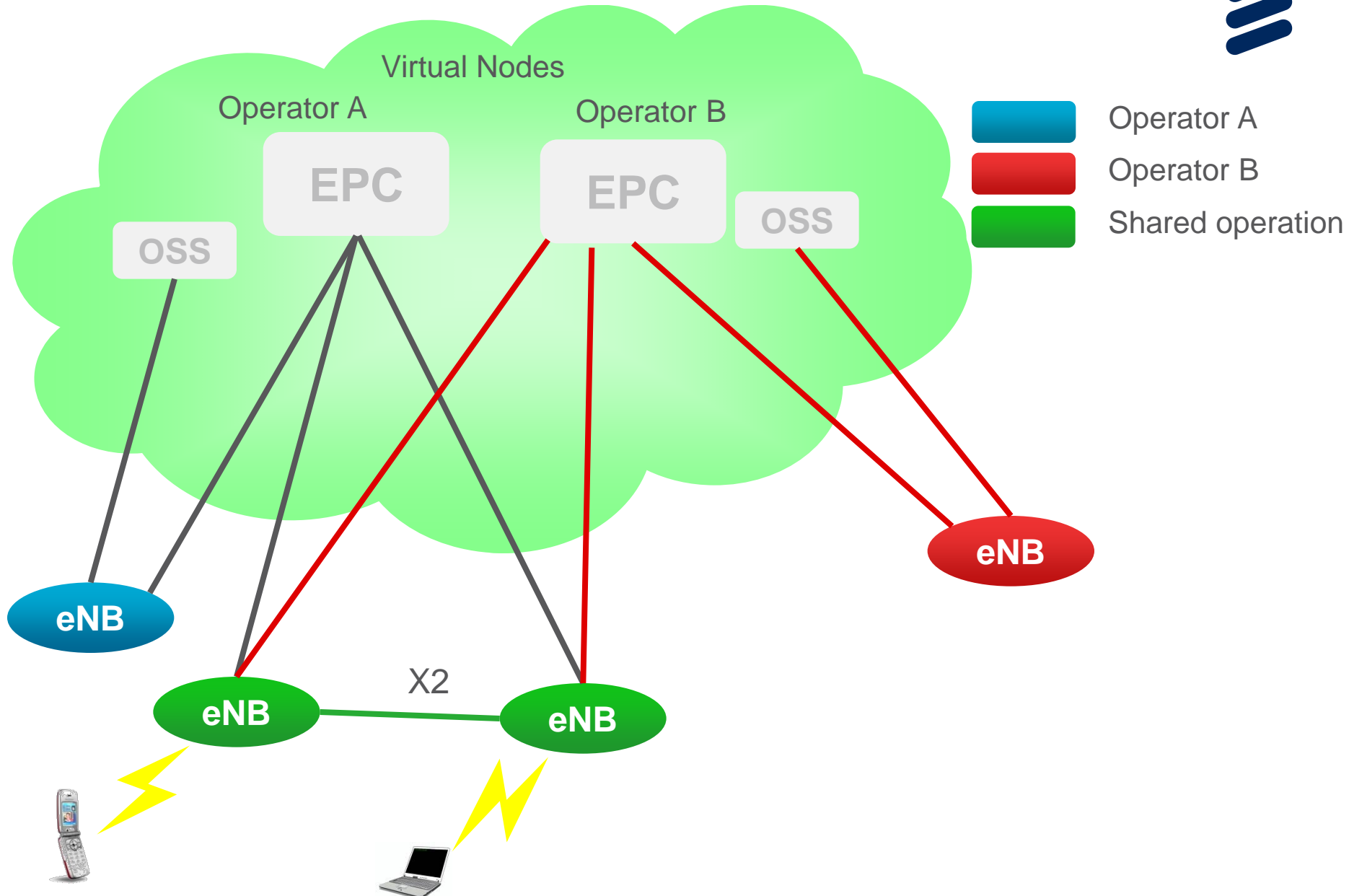
OVERVIEW MULTI-OPERATOR CORE NETWORK



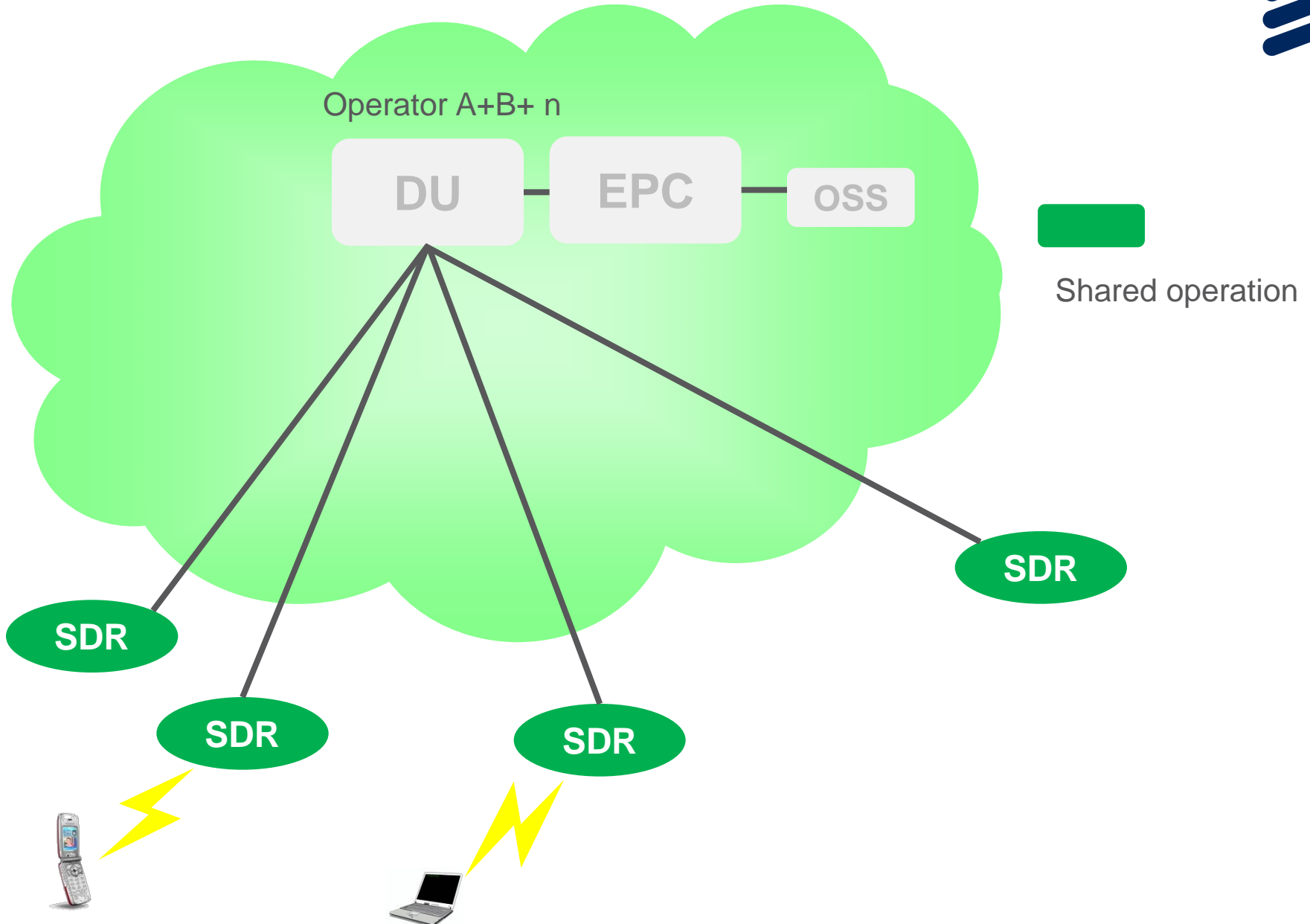
-  Operator A
-  Operator B
-  Shared operation



MULTI-OPERATOR SOFTWARE DEFINED NETWORK



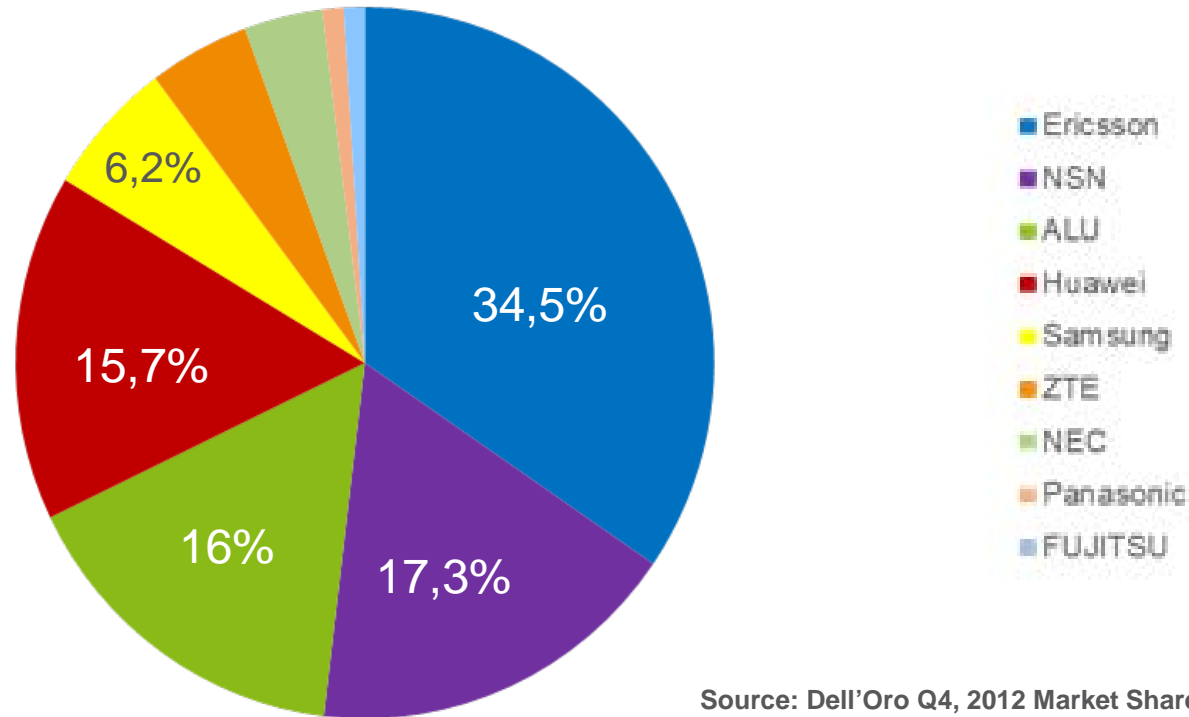
SERVICE PROVIDER SOFTWARE DEFINED NETWORK



LTE RAN- TOTAL MARKET SHARE BY REVENUE



2012



Source: Dell'Oro Q4, 2012 Market Share Report

Ericsson share - more than the #2 and #3 vendors combined !



LTE BY ERICSSON



1

LTE RBS every 4th minute

100

Commercial LTE Contracts Globally

100 000

LTE RBS in Commercial Operation Globally



ERICSSON