



ERICSSON

# ERICSSON'S NEW GENERATION RADIO SYSTEM

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# CONTINUED GROWTH IN MOBILE DATA TRAFFIC

9.5  
BILLION

mobile subscriptions  
by the end of 2020

8X

growth in smartphone  
traffic between 2014  
and 2020

55%

of mobile data traffic will  
come from video in 2020





# RADIO TRENDS

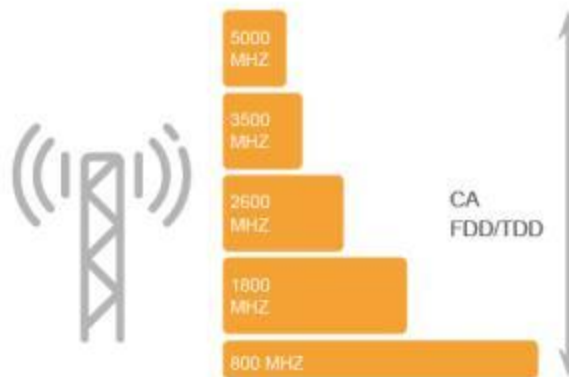
Driving the requirements for radio network transformation



## Multi-standard now



## Multi-band and more on the way



## Multi-layer is becoming the norm





# RADIO TRANSFORMATION REQUIREMENTS



2020 VISION → Multi-standard // Multi-band // Multi-layer

RADIO  
PERFORMANCE



Deliver the  
best user  
experience

SCALABILITY



Meet the  
challenge  
of growth

FLEXIBILITY



Deliver capacity  
and performance  
where it is needed

ENERGY  
EFFICIENCY



Sustainable  
and profitable  
networks

TOTAL COST  
OF OWNERSHIP



Secure the best  
business case for  
mobile networks



# THE

# CHALLENGE





# FROM RADIO BASE STATION TO RADIO SYSTEM

# ERICSSON RADIO SYSTEM

From Radio Base Station to Radio System



Ericsson Network Manager

# ERICSSON RADIO SYSTEM

## NEW HW







# THE GOLD STANDARD IN RADIO



Digital Radio System-on-Chip

Novel power amplifier technology

Super-compact filter design



# RADIOS THAT FIT



Industry's most  
compact radio

50%  
LIGHTER

50%  
SMALLER





# ONE-BOLT INSTALLATION

Building practice innovation // Ericsson Rail System  
Fast installation // Lower site & deployment costs



# ADAPT TO ANY SITE



- › Multiple mounting options
- › Simplified site acquisition
- › Minimize footprint
- › Fast installation and expansion
- › Airflow innovation





# INSTALL IN THE TIGHTEST SPACES



**3X**  
CAPACITY  
IN SAME VOLUME

Industry leading  
radio density

- › Maximizes site space
- › Saves site rental
- › Allows for growth

# REDUCED WIND LOAD



5X  
LESS



Based on 3 band sector with wind speed 55 m/s



# MICRO RADIO

# 50%

SMALLER & LIGHTER

- › New modular micro radio system
- › Macro feature parity, coordination
- › 4 liter and 5 kg installed



2X

WORLD'S BEST  
BASEBAND  
MADE BETTER





# MOST POWERFUL BASEBAND EVER



Massively-parallel processing system

Multi-standard hardware  
› LTE, WCDMA, GSM

Mixed operation  
› LTE FDD/TDD, WCDMA, GSM

Common O&M for all standards

High-capacity hardware

- › 80,000 subscribers
- › 24 cells
- › 960 MHz antenna bandwidth





# FULLY INTEGRATED BACKHAUL



# ERICSSON RADIO SYSTEM

## NEW MINI-LINK PRODUCTS



Transport portfolio with advanced radio integration

Highest node capacity in smallest form factor

World's smallest high power radio unit

Managed by Ericsson Network Manager



MINI-LINK 6351

MINI-LINK 6363

MINI-LINK 6352

Fronthaul 6392

MINI-LINK 6691

MINI-LINK 6692

# ERICSSON RADIO SYSTEM

## NEW ROUTER PRODUCTS



Transport portfolio with advanced radio integration

High density 10G and 100G interfaces

SDN enabled

Managed by Ericsson Network Manager



Router 6371  
Small Cell Outdoor



Router 6471  
Small Cell Indoor



Router 6672  
Cell Site Router



Router 6675  
Pre-aggregation Router



Router 6274  
Modular Aggregation Router





## Lowest power consumption in the industry

- Typically less than 170 W per radio for LTE
- 50% improvement in energy efficiency

Radio performance leadership **minimizes** number of required sites

# BEST ENERGY PERFORMANCE

2020 traffic with **lower energy consumption**

Additional capacity gains through **multi-layer coordination**

Sustainable Growth



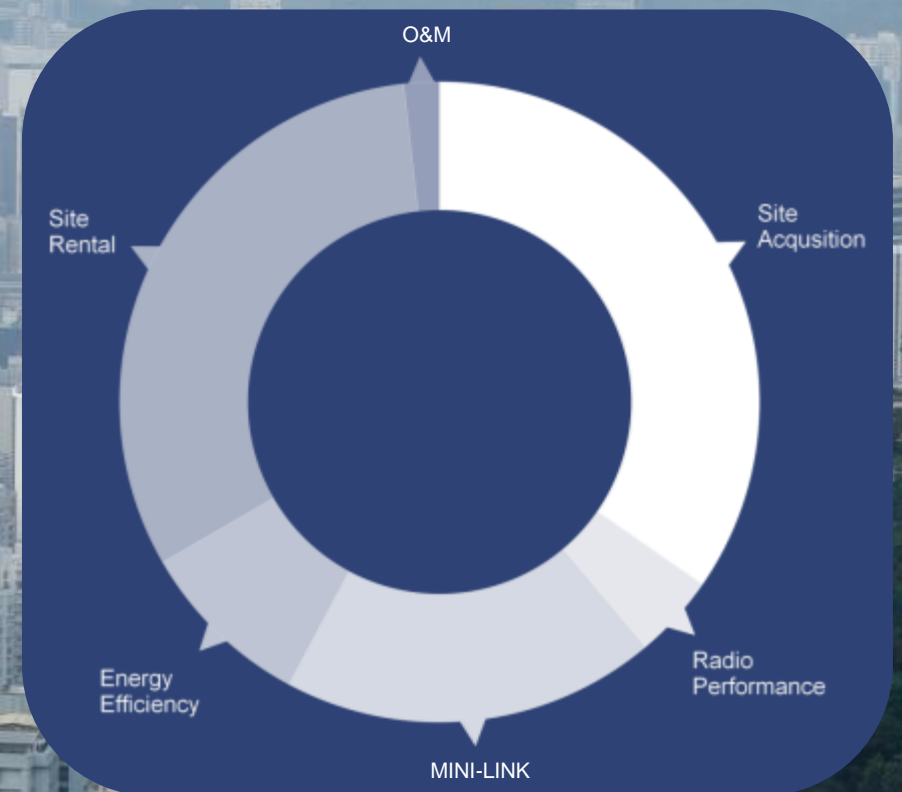


# ERICSSON RADIO SYSTEM



From Radio Base Station to Radio System  
Lower the RAN TCO by

-20%

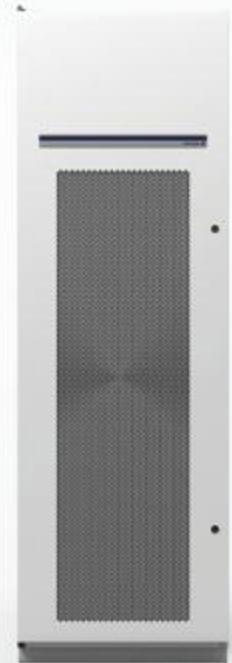




# PROTECT THE INVESTMENT



RBS 2000



RBS 3000



RBS 6000



ERICSSON RADIO SYSTEM





Q3  
2015

# DELIVERY

Ericsson Radio System  
Radio, Baseband, MINI-LINK and SW 15B

Radio 2015: 18 variants (Macro & Micro)  
10 bands (FDD & TDD)

# SUMMARY



Ericsson Network Manager

- › Modular system approach
- › Reduced size, weight and rail mounting
- › Baseband supporting all standards
- › Fully integrated backhaul
- › Superior energy performance
- › Lowest total cost of ownership





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