



SEMINARIO REGULATEL - IRG

MANAUS - BRASIL
25/26 MARCH 2010



AGENDA



- › Ericsson Profile
- › Network Sharing - Definition and Benefits
- › Shared Networks Solution
- › Regulatory Trends
- › Conclusion



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GLOBAL LEADER IN NETWORKS



 129 WCDMA contracts of
234 in the world 

 +200 Packet Core
networks, +40%
market share in 
2G/3G

 +1,400,000 microwave radios
in operation, +100 countries
and +230 customers 

 75 HSPA commercial
networks launched, 166
in total 

 58 IMS commercial
contracts 

 +350 operators are optical
radios customers 

**NETWORKS IN 175 COUNTRIES
REPRESENTING 95% OF
GLOBAL POPULATION**

LEADER IN MULTIMEDIA AND SERVICES

30,000 professionals in
Services in 175 countries

15% growth in Services

Managing networks that supports
+250 million subscribers globally

Supporting networks with
more than 1 billion
subscribers

+90 SDP commercial
deployments

230 IPTV contracts and
+60 Mobile TV & Video contracts

+85 Mobile Positioning Systems
commercial contracts

**[+1,000 SYSTEMS INTEGRATION
PROJECTS PER YEAR]**

GLOBAL EXPERIENCE LOCAL PRESENCE

- › Strong Local Presence
 - 85 years in Brazil
 - 54 years of local production
 - +3.000 professionals in Services; +1.000 in O&M
 - Spread countrywide
- › Skilled Project Managers
- › 24/7 Customer Support
 - +1.200 trouble tkts/month
- › Multi-Vendor Competence
- › Local R&D (Indaiatuba)
 - Local Development with Universities



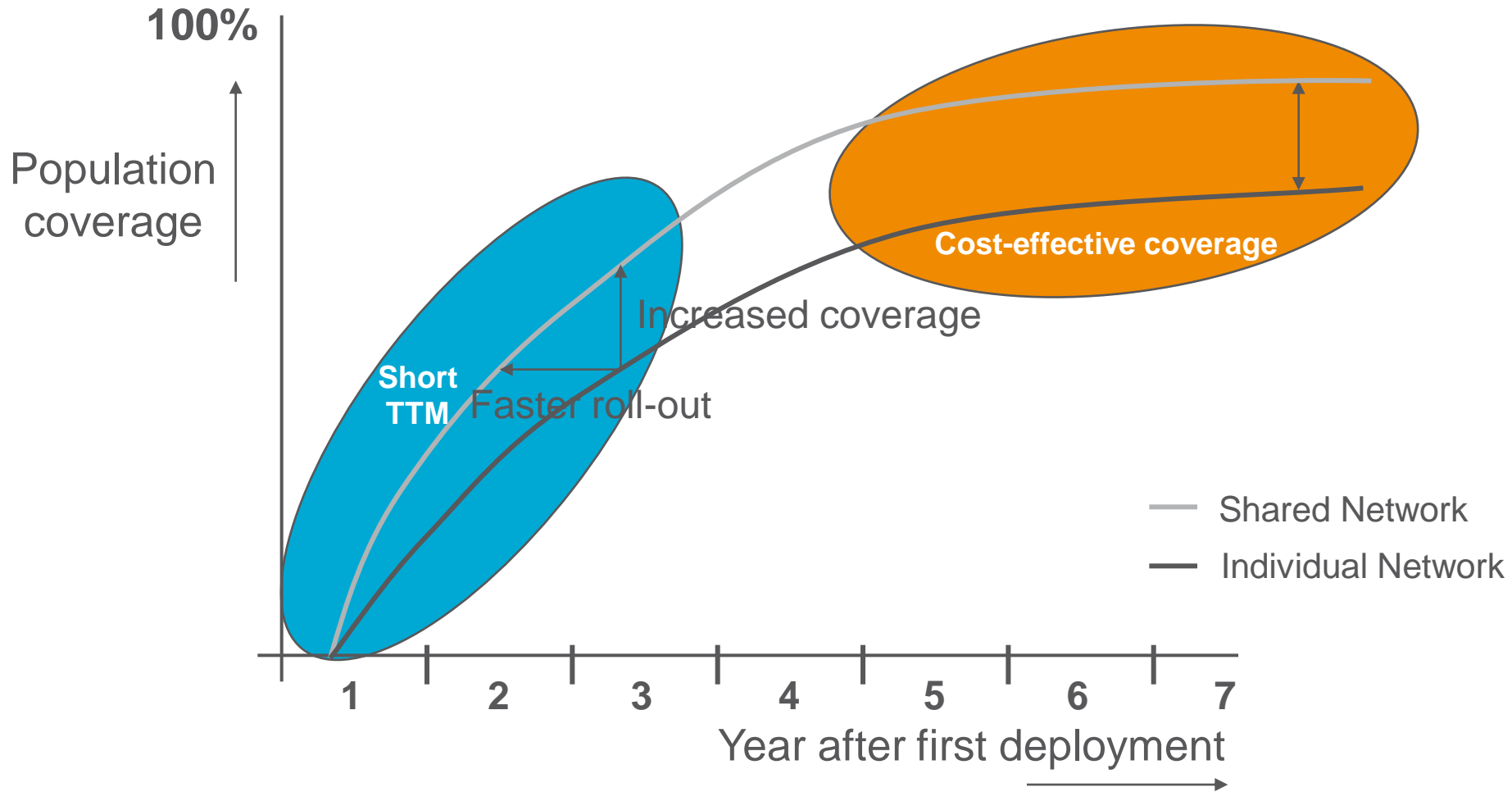
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WHAT IS SHARED NETWORKS?

Two or more operators are sharing or building the network together and still own their respective subscribers

BENEFITS OF 'SHARED NETWORKS'



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SHARED NETWORK SOLUTIONS

Site Sharing

Geographical Split Network

Common Shared Network

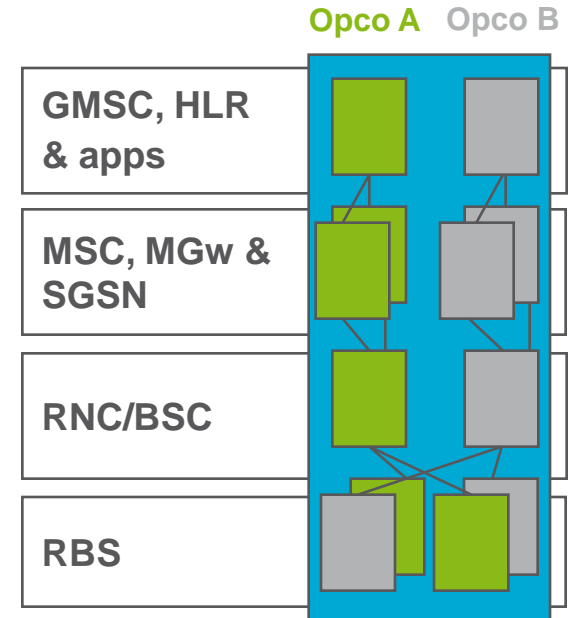
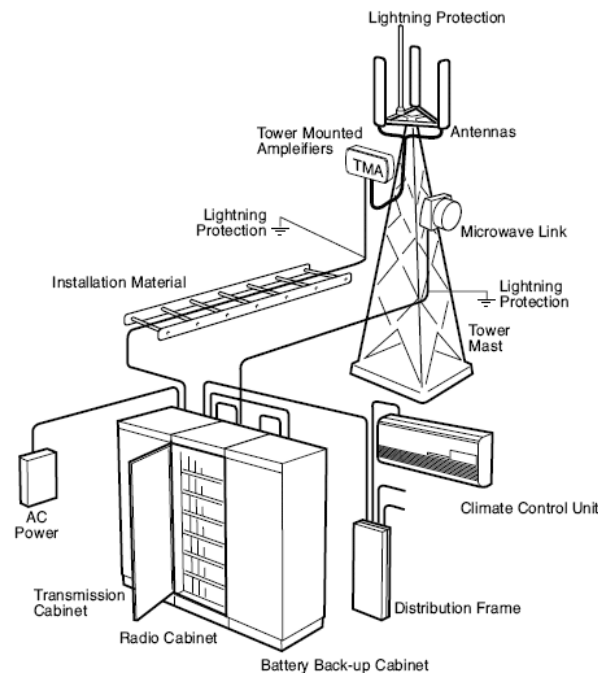
Multi Operator Core Network (MOCN)

Shared UTRAN

SITE SHARING

Wide range of Site Sharing alternatives:

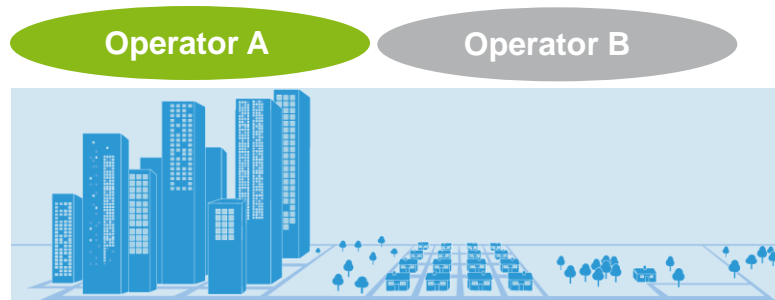
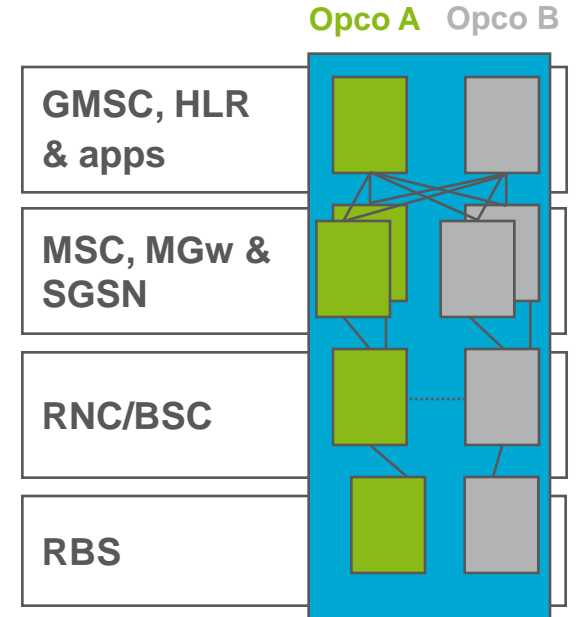
- › Site and mast
- › Power
- › Transmission
- › RF
- › Antenna/feeder



Site cost is major part of both CAPEX and OPEX

GEOGRAPHICAL SPLIT NETWORKS

- › Each operator has its individual Network
 - Deployed in different areas
- › Deploy National Roaming (incl. handover and cell re-selection)
- › One carrier per RBS minimum configuration
- › 3GPP compliant
 - Standard interfaces

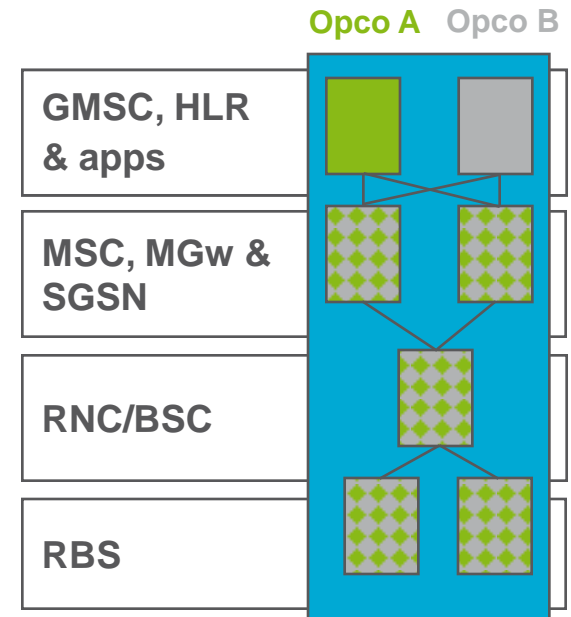


↔
National roaming
Handover
Cell re-selection

Cost reduction for operator

COMMON SHARED NETWORK

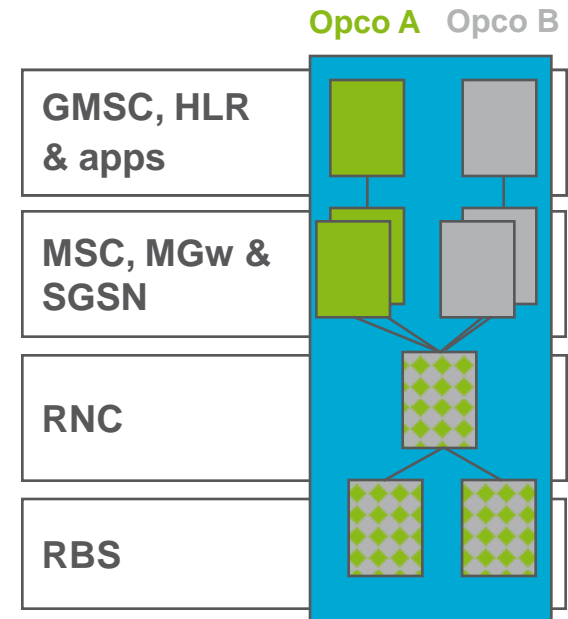
- › A Common Network
 - Radio and Core
- › Individual Home Networks
 - Subscriber data, interconnections, services
- › Operators have common cells, capacity, spectrum...
 - New PLMN code is allocated for the Radio Network
- › One carrier per RBS minimum configuration
- › 3GPP compliant
 - Standard interfaces



Largest share biggest saving potential

MULTI OPERATOR CORE NETWORK

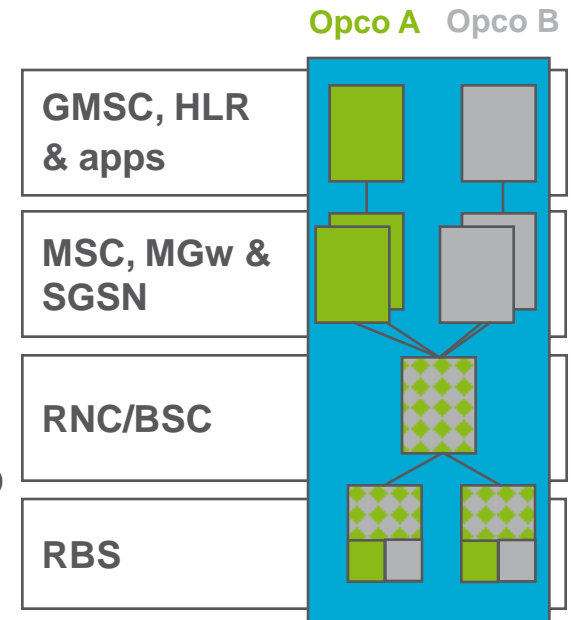
- > Individual Core Network
- > Common Radio network
 - Shared resources (shared carriers, transmission, RNC and RBS)
 - New PLMN code is allocated for the Radio Network
- > One carrier per RBS minimum configuration
- > 3GPP compliant
 - Standard interfaces



Easier handling of subscriber data

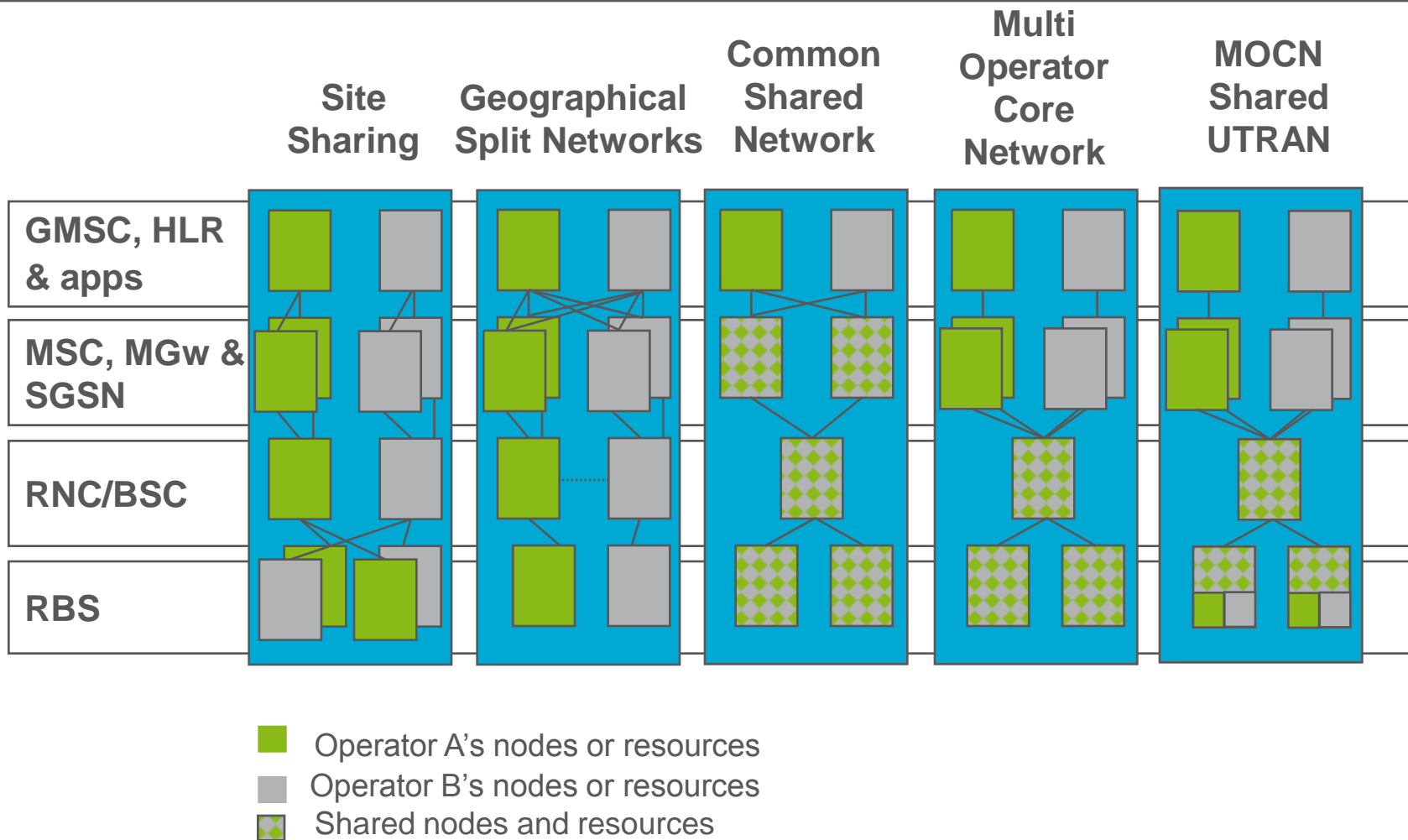
SHARED UTRAN

- › Shared RBS, RNC & transmission
- › Individual core networks
- › Individual frequencies & cell settings
 - Minimum configuration 2 carriers per RBS when RBS is shared
- › Multi Carrier RBS
 - Operators can add their own base stations to shared RNC/BSC
- › 3GPP compliant
 - Standard interfaces



Solution for specific requirements

OVERVIEW OF DIFFERENT SOLUTIONS SHARED NETWORKS



Complete Shared Network solution portfolio

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REGULATORY TRENDS

- › According to the ITU, 74% of countries across the world permit infrastructure sharing, while 56% of the countries mandate infrastructure sharing. By infrastructure sharing, most countries are referring to passive sharing.
- › Operators are encouraged (Bangladesh), presented incentives (India) or even mandated (China) to share the passive components of radio sites – towers, shelters, cooling, power etc. In some countries sites are regulated as a separate, sharable, non-operator asset (Indonesia).

REGULATORY TRENDS

- › In most countries sharing of active site components is not allowed as the regulator wants to maintain full competition.
 - Sweden and UK are exceptions.
- › Active sharing is sometimes allowed regionally (in rural areas with sparse population)
- › Sharing to achieve Universal Service Obligations is being considered in different ways – sometimes using Universal Service Funds to finance “new technologies”

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IMPACTS OF SHARED NETWORKS

Operator

- **Faster Time To Market**
- **Address more customers** by providing more cost-effective coverage
- **Save money** on building and operating the network

Customer

- Better and **more coverage**
- **Earlier service** availability

Regulator

- Reduce **Environmental concerns**
- **Increased competition** on services
- Reduce competition on coverage



ERICSSON