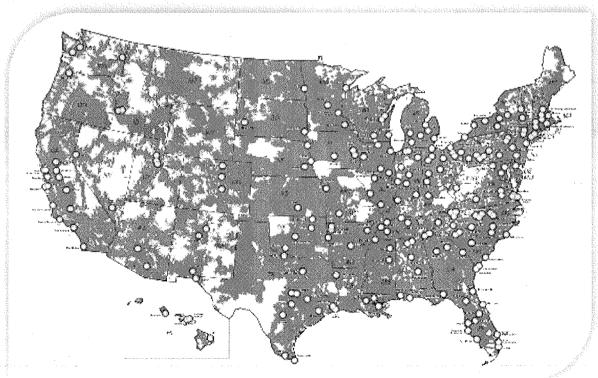


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Source: Verizon



Source: Verizon



## NETWORK & CLOUD: COCKPIT VIEW

#### Key trends

24 x 7 x M (anywhere)

Services evolution: premise -> cloud

Cloud & network are interdependent

#### Operator needs

24 x 7 x M => ensure: coverage, capacity

Assure QoE for cloud services

Expand business, expand offerings

#### Network-enabled cloud

Connectivity: 24 x 7 x M, efficient coverage and capacity, QoE, uplink

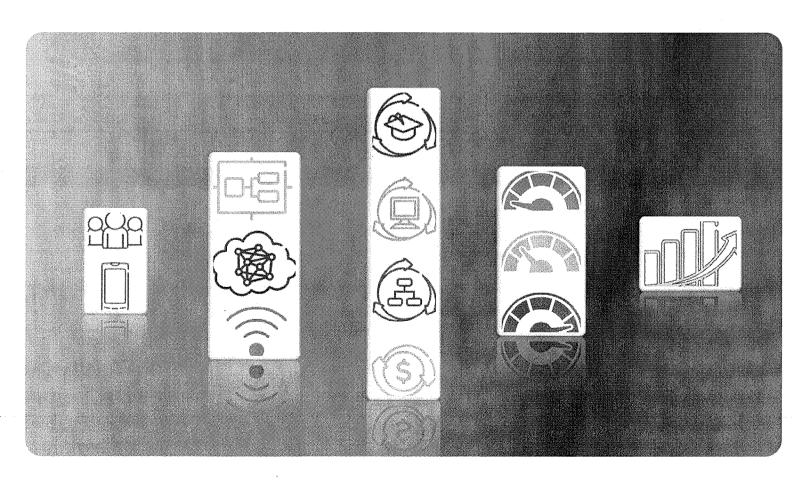
Computing: Dynamic distribution of 'point of computing' => embedded functionality

Creation: new services offerings, own and enabling others through api / exposure

Control: sla-based delivery on an end-to-end basis (security, context etc)

Customize: architect, build, optimize and operate

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MWC 2012

HÅKAN ERIKSSON CTO 2003 - 2012 HEAD CUSTOMER UNIT AUSTRALIA AND NEW ZEALAND

### THINGS WE THINK

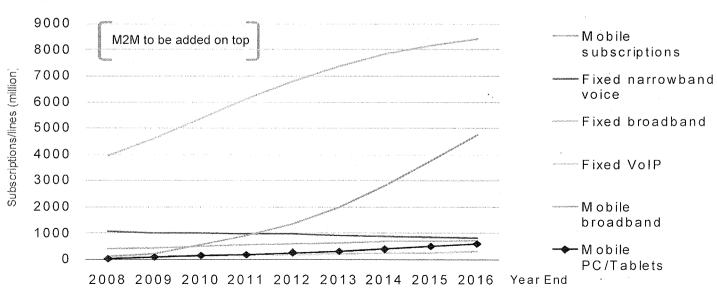


By 2020, everything that benefits from a network connection will be connected.

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#### FIXED & MOBILE SUBSCRIPTIONS

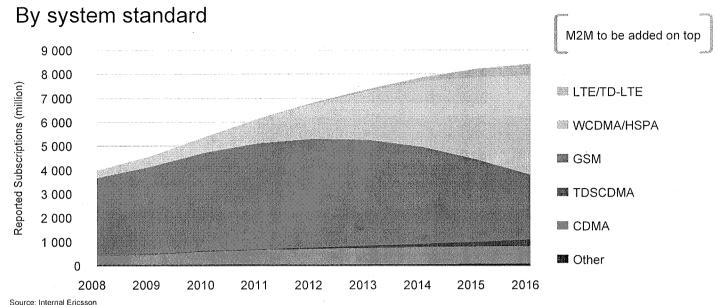




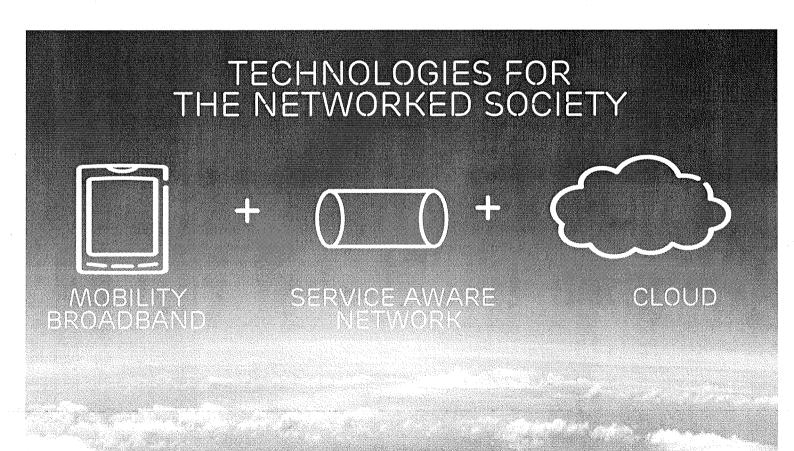
Source: Internal Ericsson

### REPORTED MOBILE SUBSCRIPTIONS



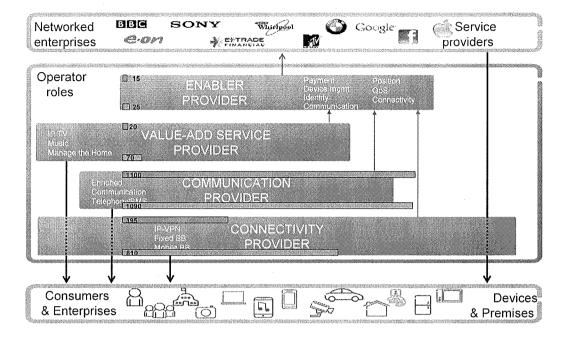


Source: Internal Ericsson
This slide contains forward looking statements



#### **OPERATOR ROLES**

60 of which Google 24 Internet advertising

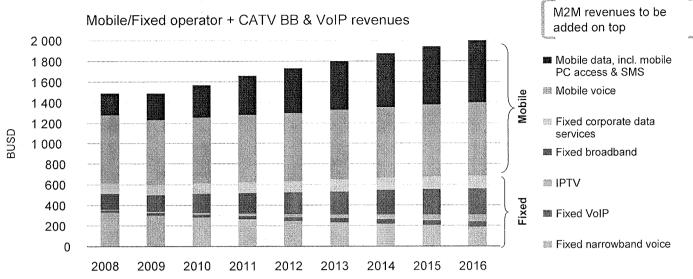


BUSD ■ 2009 ■ 2015



#### **OPERATOR REVENUES**



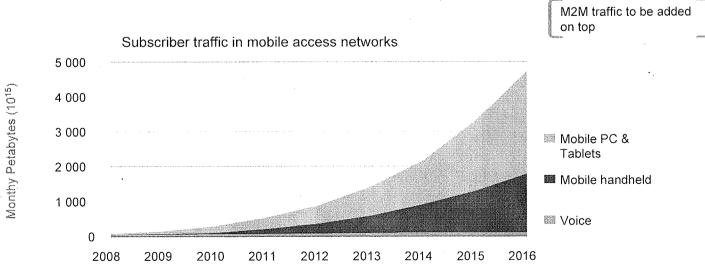


Source: Internal Ericsson
Fixed and mobile service revenues. In addition, fixed BB & VoIP revenues from cable and alternative providers are included.
This slide contains forward looking statements

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## MOBILE TRAFFIC, VOICE AND DATA

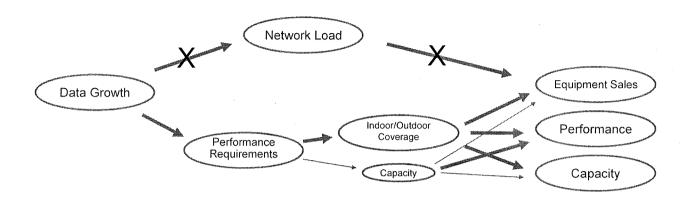




Source: Internal Ericsson Definitions: see note pages. DVB-H, Mobile WiMax, M2M and WiFi traffic not included This slide contains forward looking statements

## CORRELATION BETWEEN DATA TRAFFIC GROWTH AND CAPEX



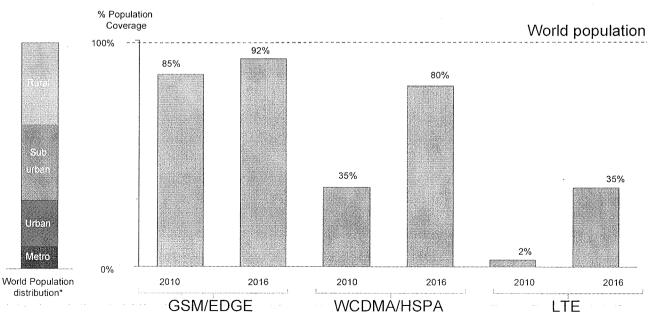


## Network load is mis-leading indicator

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#### MOBILE WORLD TECHNOLOGY COVERAGE 3GPP TECHNOLOGIES – 2010 VS 2016 ESTIMATE



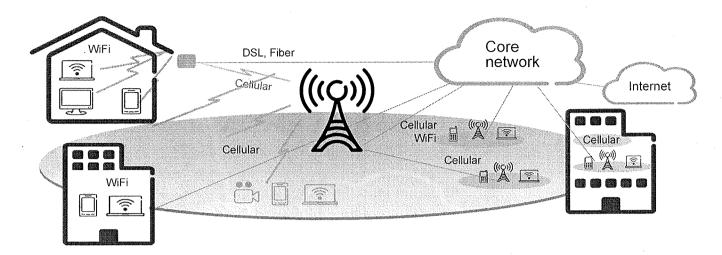


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\*Metro >4000 people/sq km), Urban 1000-4000 people/sq km, Suburban 300-1000 people/sq km, Rural (<300 people/sq km)

#### MOBILITY AND BROADBAND ONE NETWORK - MANY PIPES



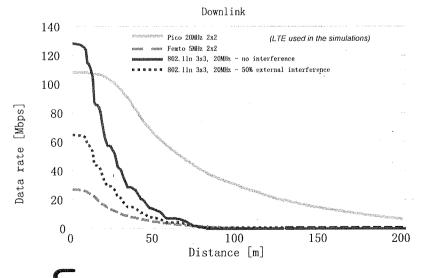


Personalized services in an Always Best Connected environment

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## SMALL CELL DEPLOYMENT ASPECTS





#### Pico

- > Maximizes the value of site
- > Full seamless mobility
- Licensed spectrum to manage potential interference

#### WiFi

- > Limited coverage need
- > Indoor, low-interfered locations
- > Site and backhaul not a cost

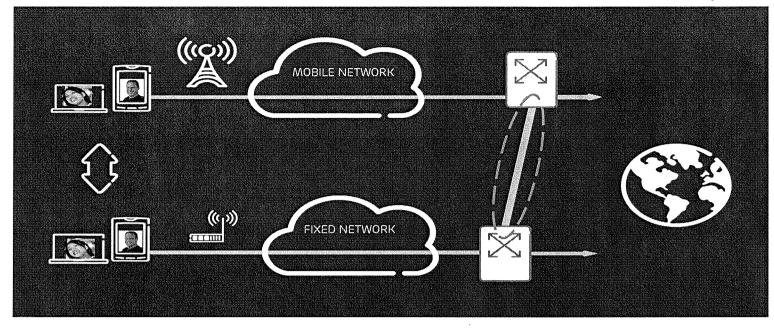
#### **Femto**

- > No data rate benefit over WiFi
- › Interference and hand-over issues
- > Indoor voice quality

Wi-Fi is a good complement to cellular

### NETWORK INTEGRATED WIFI SOLUTION





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#### **3GPP LTE RELEASES**





#### Rel-8

First LTE release

Standard 2008

"Basic features"

Mobile broadband

#### Rel-9

2nd LTE release Standard 2009

Voice centric and various enhancements

## Lte.

#### Rel-10

"LTE-advanced"

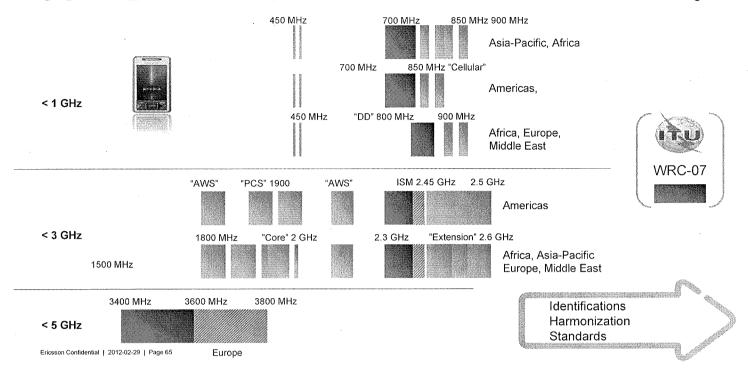
Standard 2011

Fulfill IMT-A requirements Wider spectrum higher peak bitrates, ...

Release independent (frequency bands, ...)

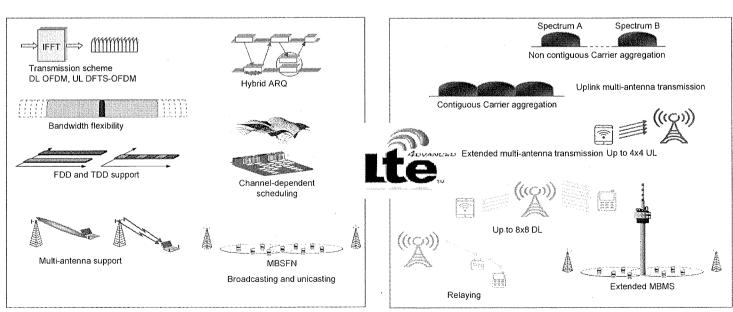
## CURRENT IMT SPECTRUM MAP





#### LTE TECHNOLOGY AND FLEXIBILITY





### LTE REL10 - FIRSTS FIELD TESTS



LTE Rel10 coverage in Kista

Carrier aggregation: 60 MHz BW

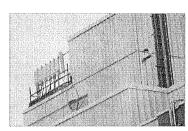
Achieving 1 Gbps in the field

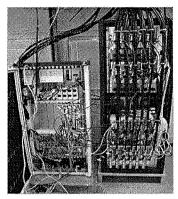
8x8 MIMO in downlink

Built on 3GPP Rel 10, meeting IMT Advanced

>300 Mbps in most parts of Kista

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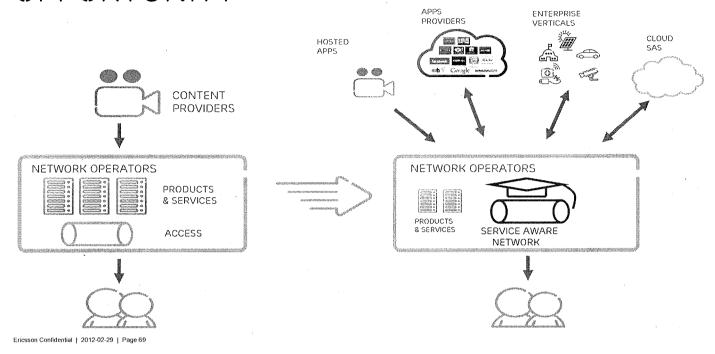


# TECHNOLOGIES FOR THE NETWORKED SOCIETY

SERVICE AWARE NETWORK

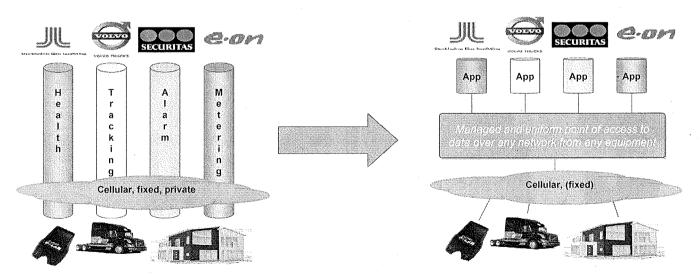
## BROADENING THE MARKET OPPORTUNITY





## VERTICALS IN THE 50B VISION BASED ON HORIZONTAL LAYERS

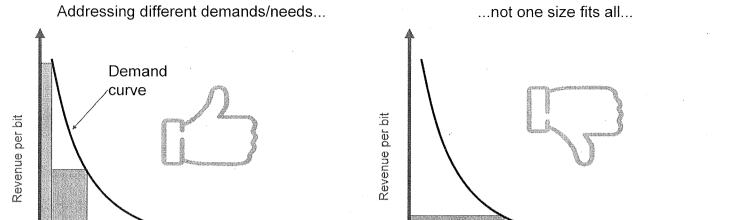




Building on standardized technology to achieve economy of scale

## MAXIMISE CONNECTIVITY BUSINESS THROUGH TAILORED OFFERINGS





Flat rate -> Volume based -> Value based

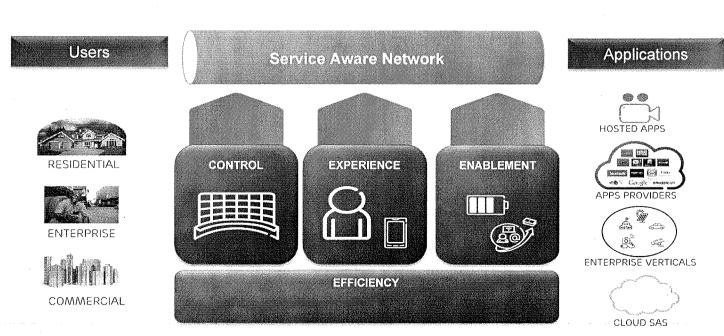
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Traffic

#### SERVICE AWARE NETWORK



Traffic



### SERVICE AWARE NETWORK





#### Service Aware Network

#### **Applications**



RESIDENTIAL



**ENTERPRISE** 



CONTROL Rating/Billing Service Control Performance

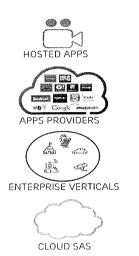
Traffic Mgmt.

Policy Mgmt.

EXPERIENCE Personalization Context **Battery Life** Response Time Cost control

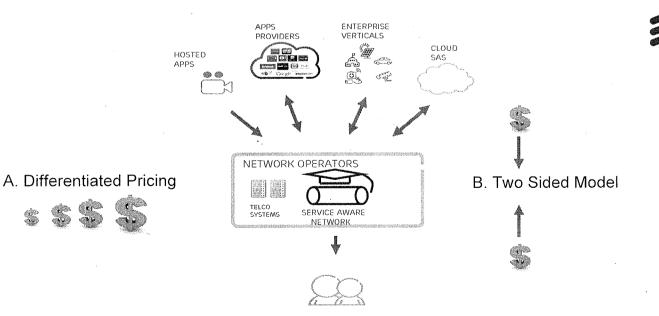
Content optimization





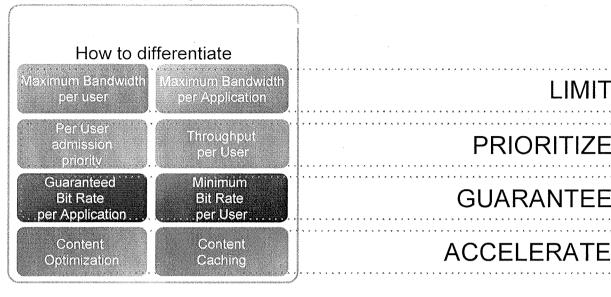
EFFICIENCY
NETWORK EFFICIENCY AND CAPACITY

Network Signalling
Network Bandwidth Efficiency



## NETWORK CONTROL & USER EXPERIENCE

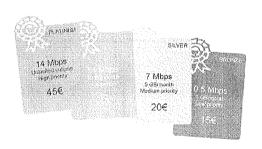




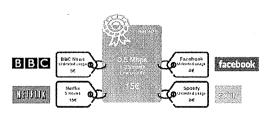
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### DIFFERENTIATED PRICING





#### **Differentiated Services**

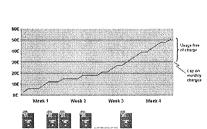


Add-on packages

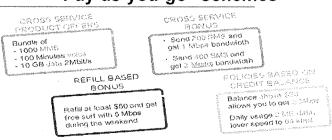
OAY RASS

0.5 Mbps
1 Garnorth
Low priorly

3€



#### "Pay-as-you-go" schemes

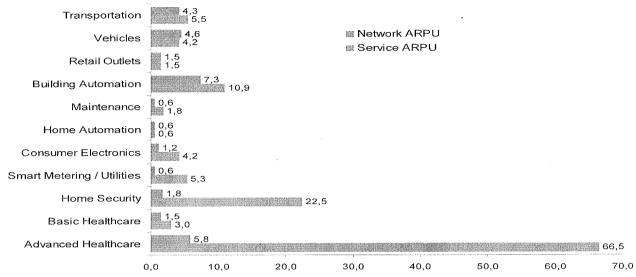


**Cross-services and promotions** 

## SERVICE REVENUE ADDED ON TOP



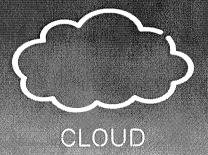




Source: Strategy Analytics; Embedded Mobile Long Term Forecast, 2010

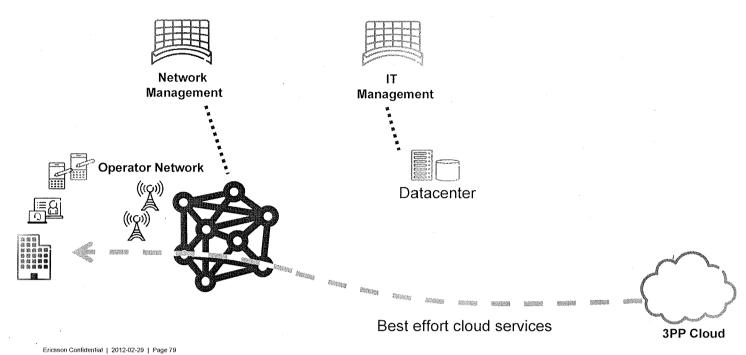
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# TECHNOLOGIES FOR THE NETWORKED SOCIETY



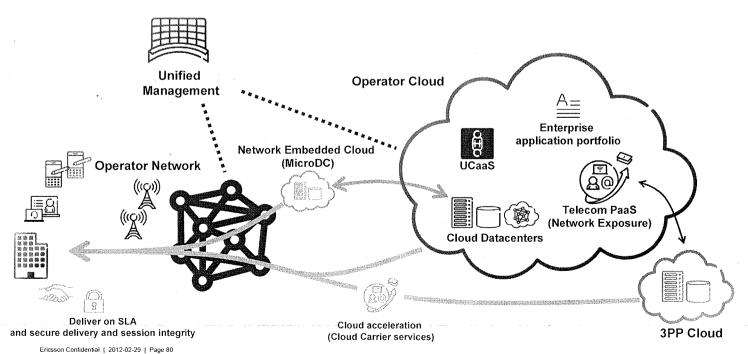
## THE STARTING POINT



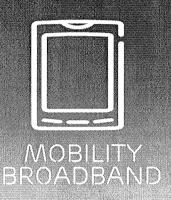


## MOVE TO THE EMBEDDED CLOUD





# TECHNOLOGIES FOR THE NETWORKED SOCIETY

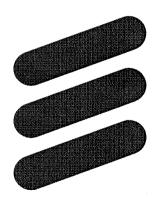






SERVICE AWARE NETWORK

OLOUD



ERICSSON

# WELCOME TO STOCKHOLM JUNE 25-26, 2012



- > Broadband for all
  - Seminar at the Stockholm Concert House
  - Private meetings with Swedish regulator PTS
  - -Technology briefings with Ericsson experts
- > Governments & Regulators only
- 2011 the seminar gathered 65 delegates from
   35 countries all six continents were represented

#### Broadband for all

a networked and prosperous society



Seminar June 27, 2011 Stockhom

- What are the most effective Government initiatives for nationwide broadband deployment and use?
- What key regulatory and technology aspects need to be addressed in order to fulfill the promise of 100 Mbps broadband service to a majority of our society by 2020?

ation \* sadeakn nHat

- now was countries unseash 500 MHz at spectrum for broadband? A strategic issue also for our economy.
- In 2010 the seminar gathered 65 Government & Regulato representatives from 35 countries on all continents.



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