



CLOUD CONNECTIVITY

OFFENSE & DEFENSE

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VICE-PRESIDENT, STRATEGY & MARKET DEVELOPMENT
ERICSSON SILICON VALLEY

3 KEY MESSAGES



WHAT IS CLOUD COMPUTING?

THERE ARE (TOO) MANY DEFINITIONS
COMMON GROUND OF MOST DEFINITIONS:

PAY-PER-USE

ELASTIC CAPACITY

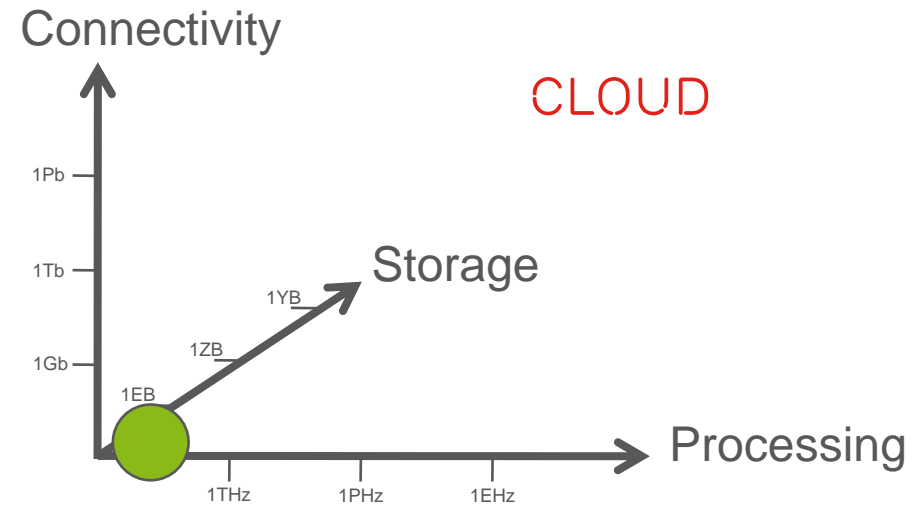
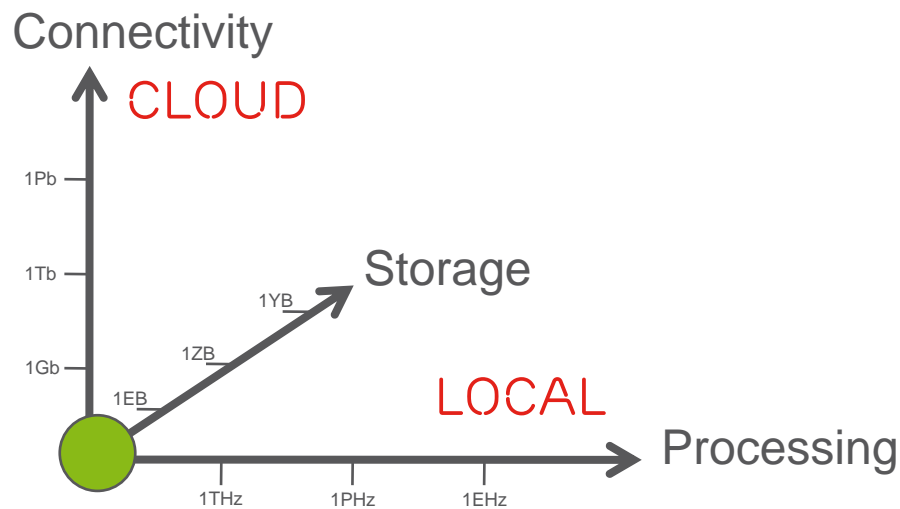
SELF-SERVICE INTERFACE

RESOURCES ARE VIRTUALIZED

WHY IS CLOUD GETTING ATTENTION ?

DEVICES

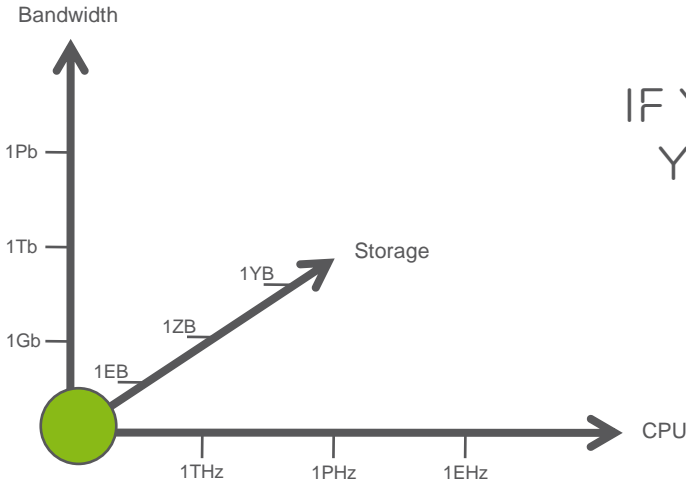
NETWORK & DATA CENTERS (INCLUDING SERVICES)



DECADES OF DEBATE ON CENTRALIZED VERSUS DISTRIBUTED

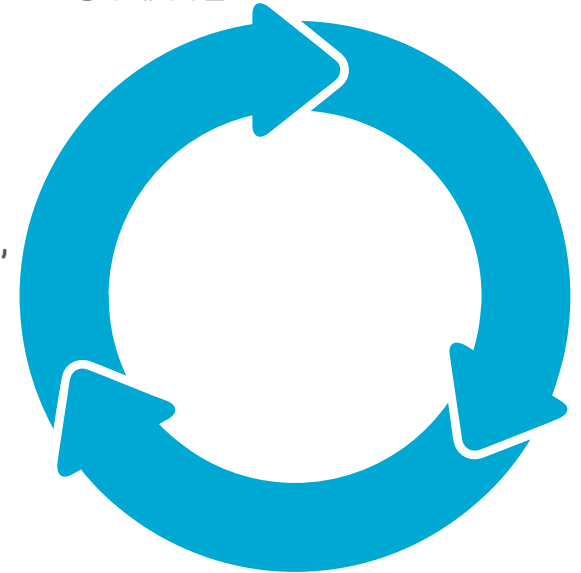
WHY IS CLOUD GETTING ATTENTION ?

DEVICE, NETWORK/DC
(Size/Speed at Cost/unit)



IF YOU CAN STORE MORE,
YOU DOWNLOAD MORE

IF YOU CAN PROCESS MORE, YOU
STORE MORE



IF YOU CAN DOWNLOAD MORE
YOU WILL STORE AND PROCESS MORE

AND FINALLY TWO ORTHOGONAL REQUIREMENTS
VIRTUALIZATION = LOCATION DOES NOT MATTER BUT
MOBILITY = LOCATION MATTERS

THE NEW BROADBAND WORLD REALITIES OF CONNECTIVITY

**Device
Momentum**

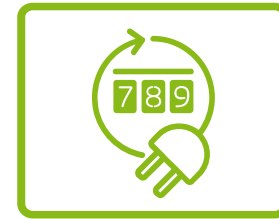
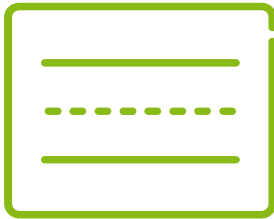
**Resource
Utilization**

Applications

**Content and
apps storage**

**Power
Consumption**

**Business
Models**



Shared

Dedicated

Defined & tested

Own device

Irrelevant

Flat Rate



Personal

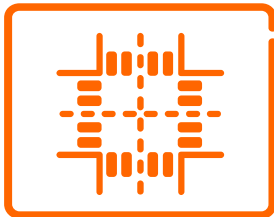
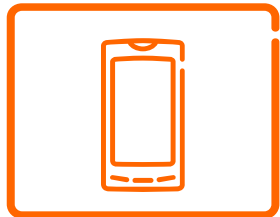
Shared

100s per day

Cloud

Low

Differentiated



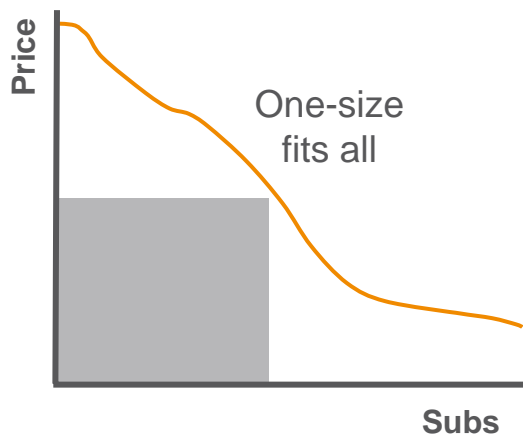
THREE WAVES OF MOBILE BROADBAND EVOLUTION

Mobile Broadband 1st Wave

Establishing Market



Standard

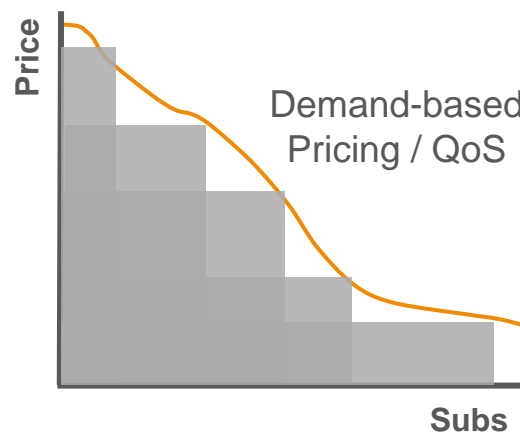


Mobile Broadband 2nd Wave

Differentiating Services



Smart

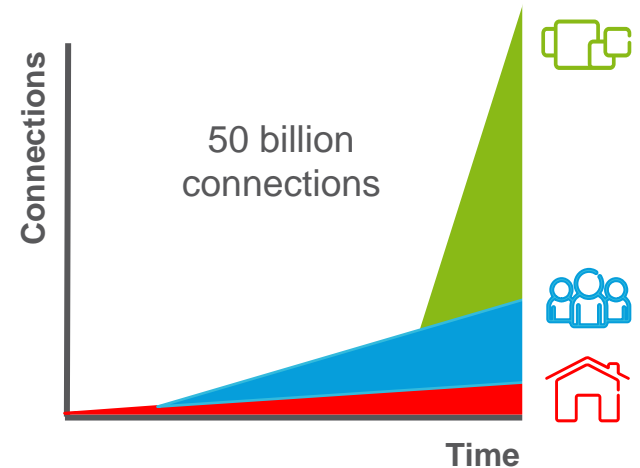


Mobile Broadband 3rd Wave

Connecting Everything

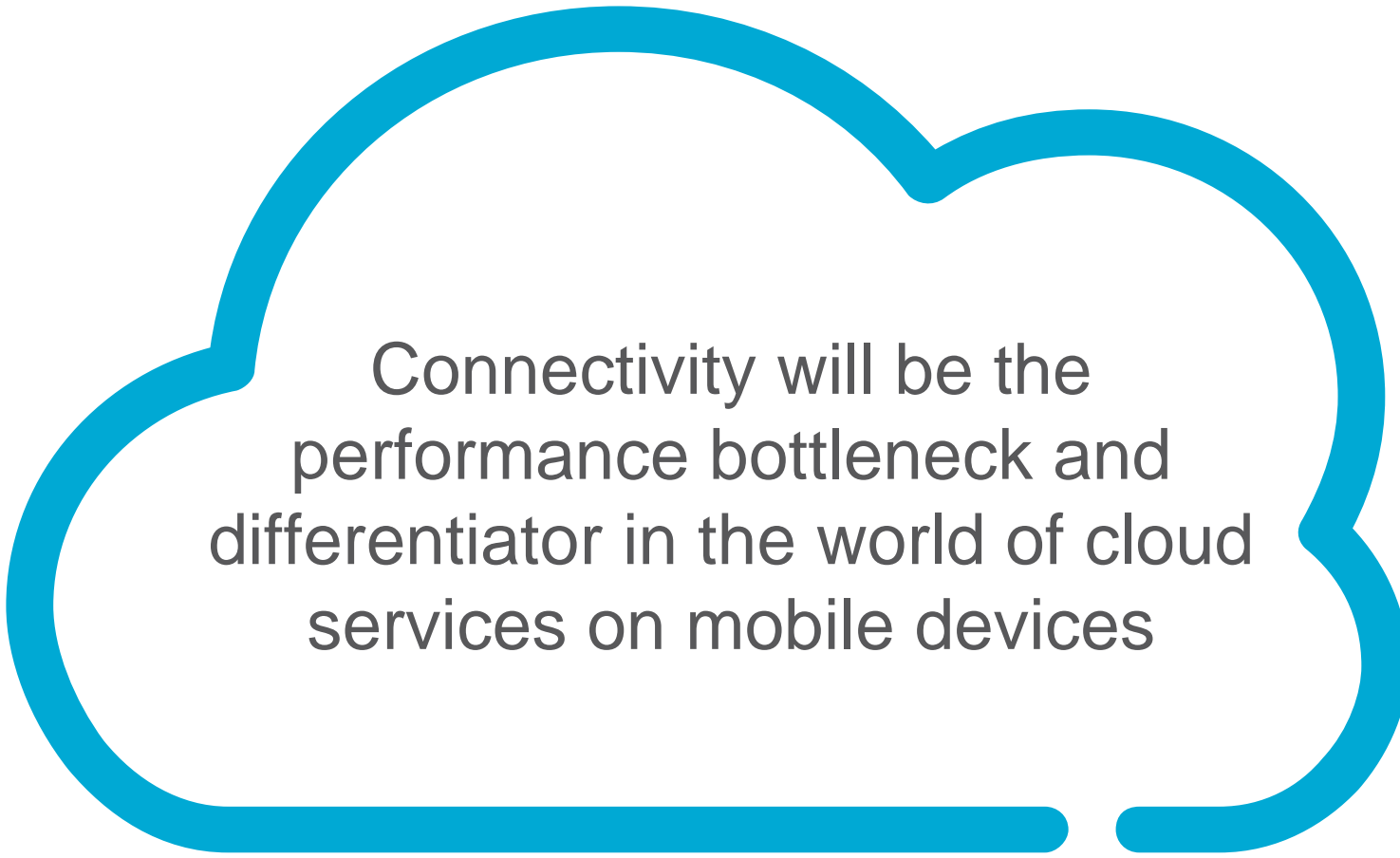


Scale



RIGHT CONNECTION GIVES RIGHT EXPERIENCE (CLOUD IS IN THE AIR)





Connectivity will be the
performance bottleneck and
differentiator in the world of cloud
services on mobile devices

ANALYSTS AGREE: CLOUD IMPACTS

- › Infrastructure:
 - Running applications in the cloud will create a huge increase in **network traffic**
- › Cloud computing must deliver a good user **experience**
 - Network delays (latency) must be minimised
- › This will **require a significant infrastructure build** to provide the capacity and make sure it is not constrained

NOMURA

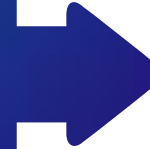
Source: Nomura Dec 2009

3 KEY MESSAGES

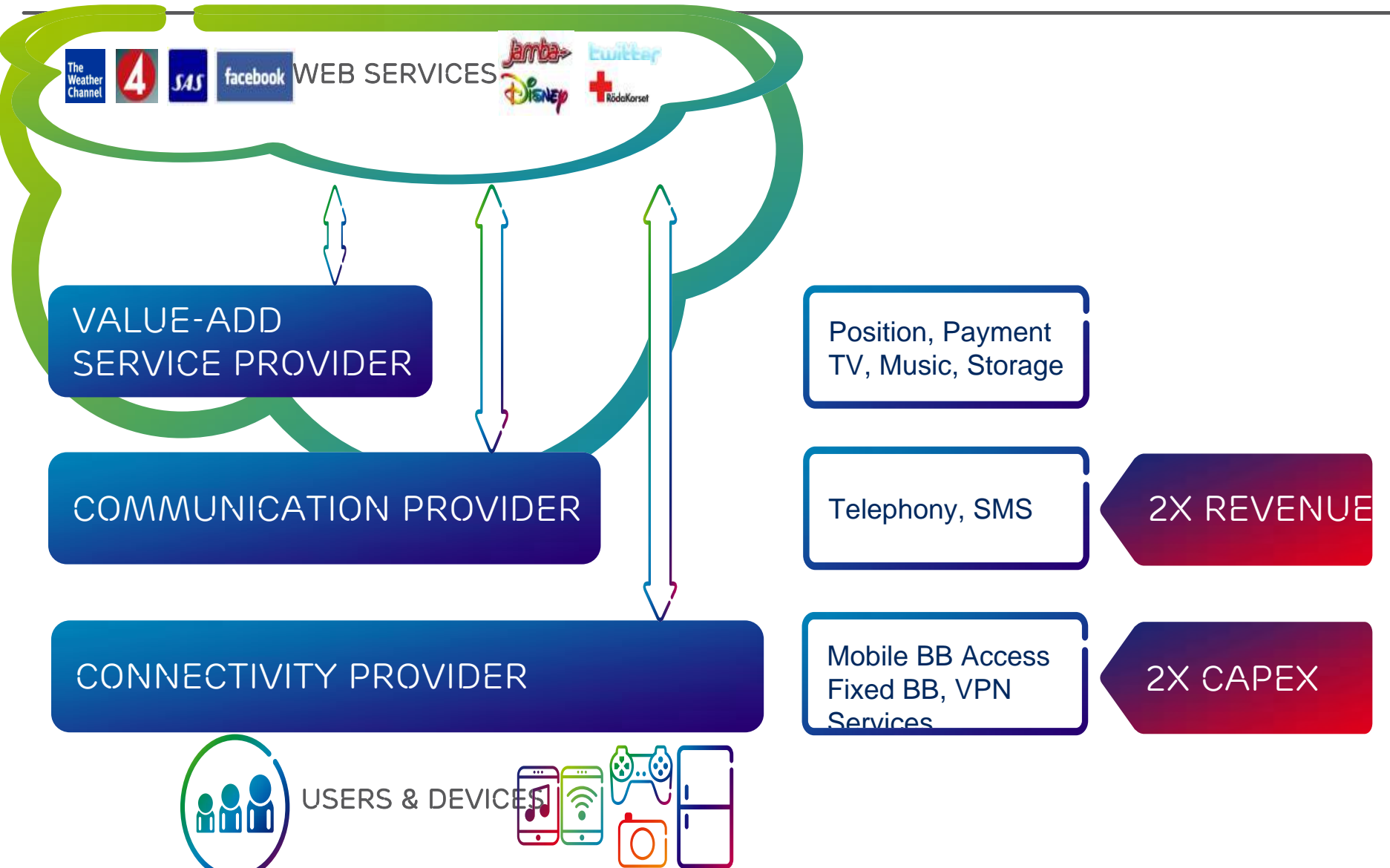
2

Managed
Connectivity –
Operator Defensive
play for Traffic
increase

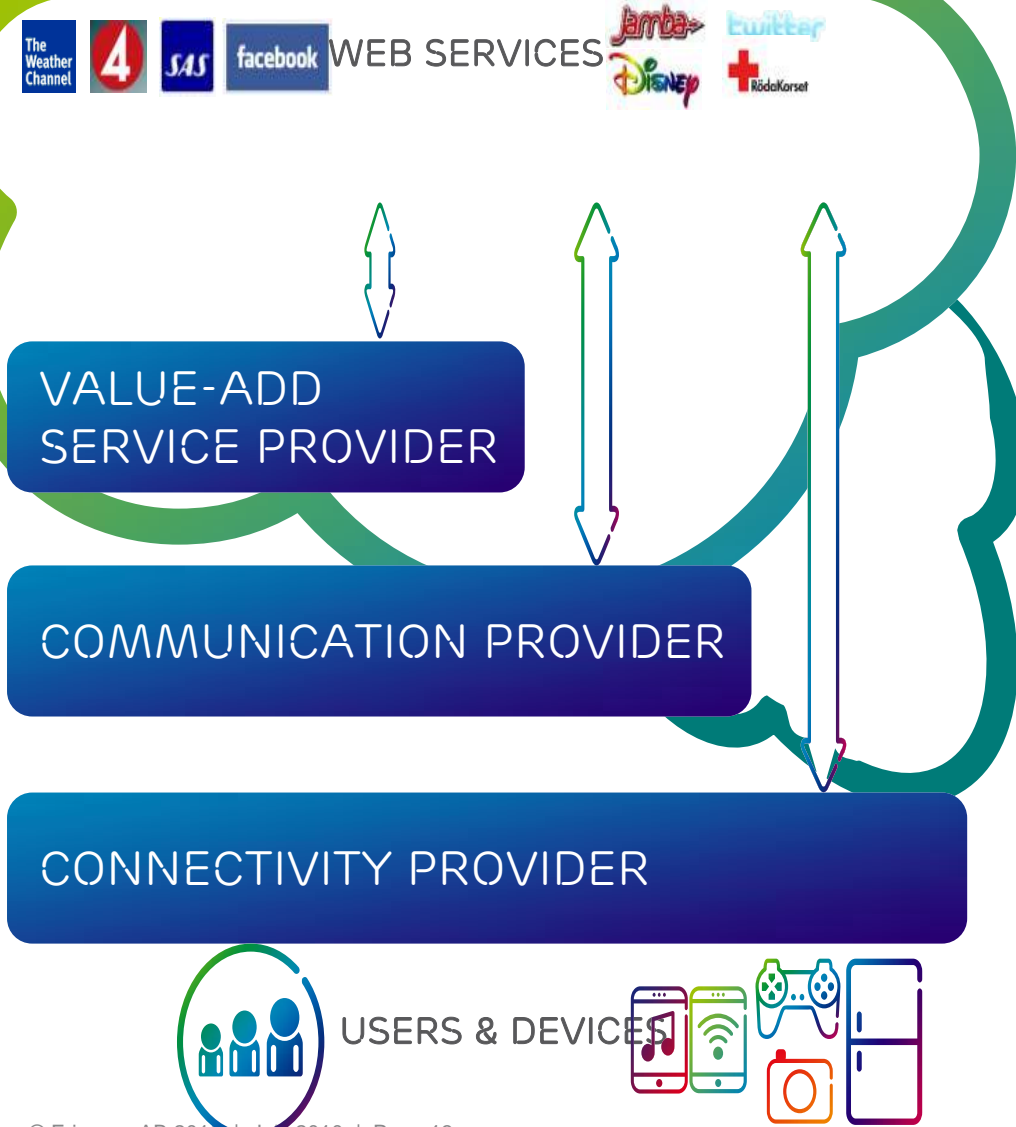
Interoperability &
Cloud Services –
Operator Offensive
play



OPERATOR ROLES & CHALLENGES



OPERATOR OPPORTUNITIES



4. MOVE UP IN VALUE CHAIN

3. INNOVATE

2. CONTROL PIPES
1. DEFEND VALUE

ERICSSON ENABLES OPERATORS



VALUE-ADD SERVICE PROVIDER

COMMUNICATION PROVIDER

CONNECTIVITY PROVIDER

CLOUD ENABLER

CONNECTIVITY & COMMS

Ericsson helps Operators & Verticals provide Cloud Services & InterOperable OTT

Ericsson is the Connectivity & Communication Enabler



USERS & DEVICES



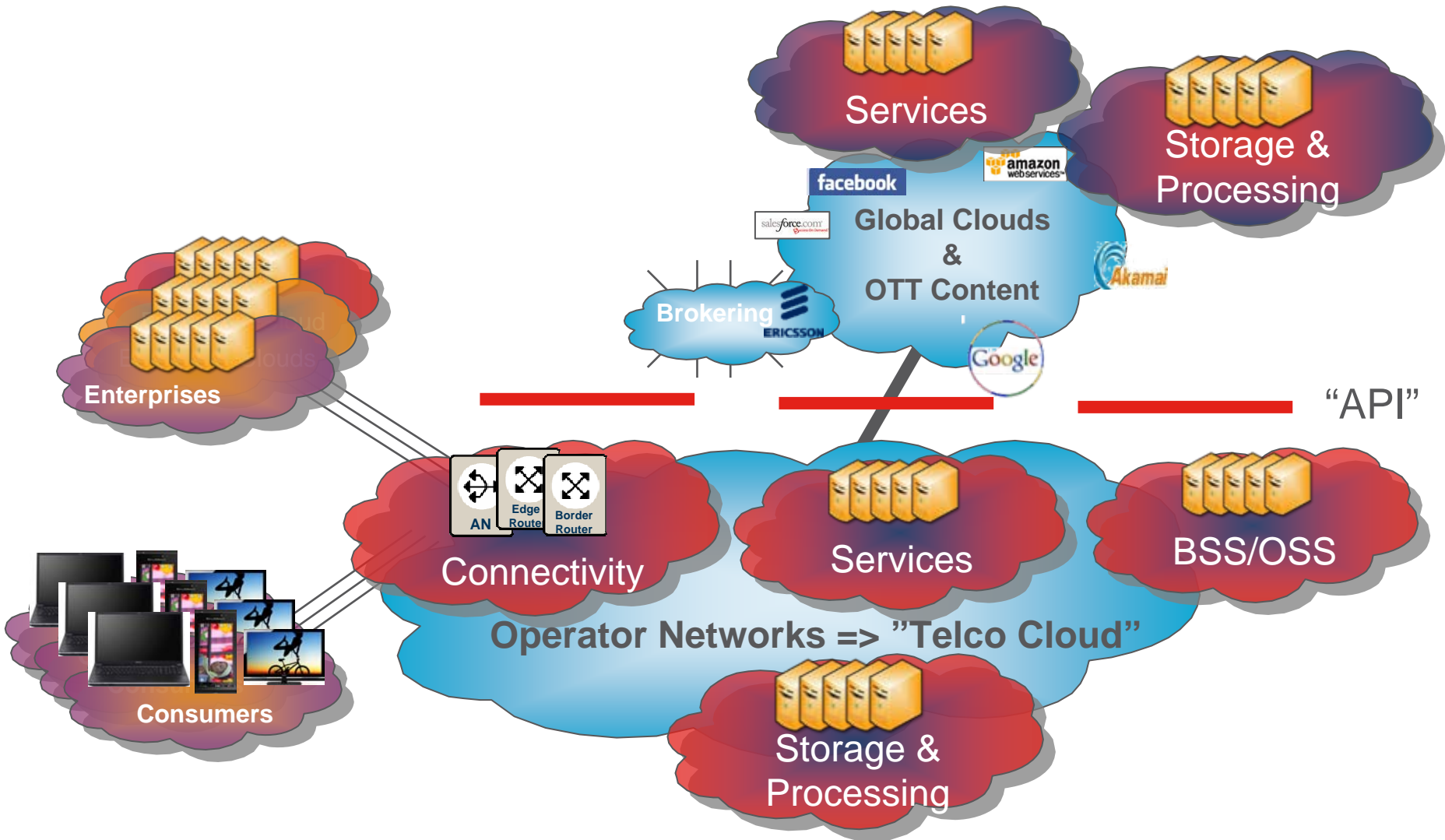
3 KEY MESSAGES

3

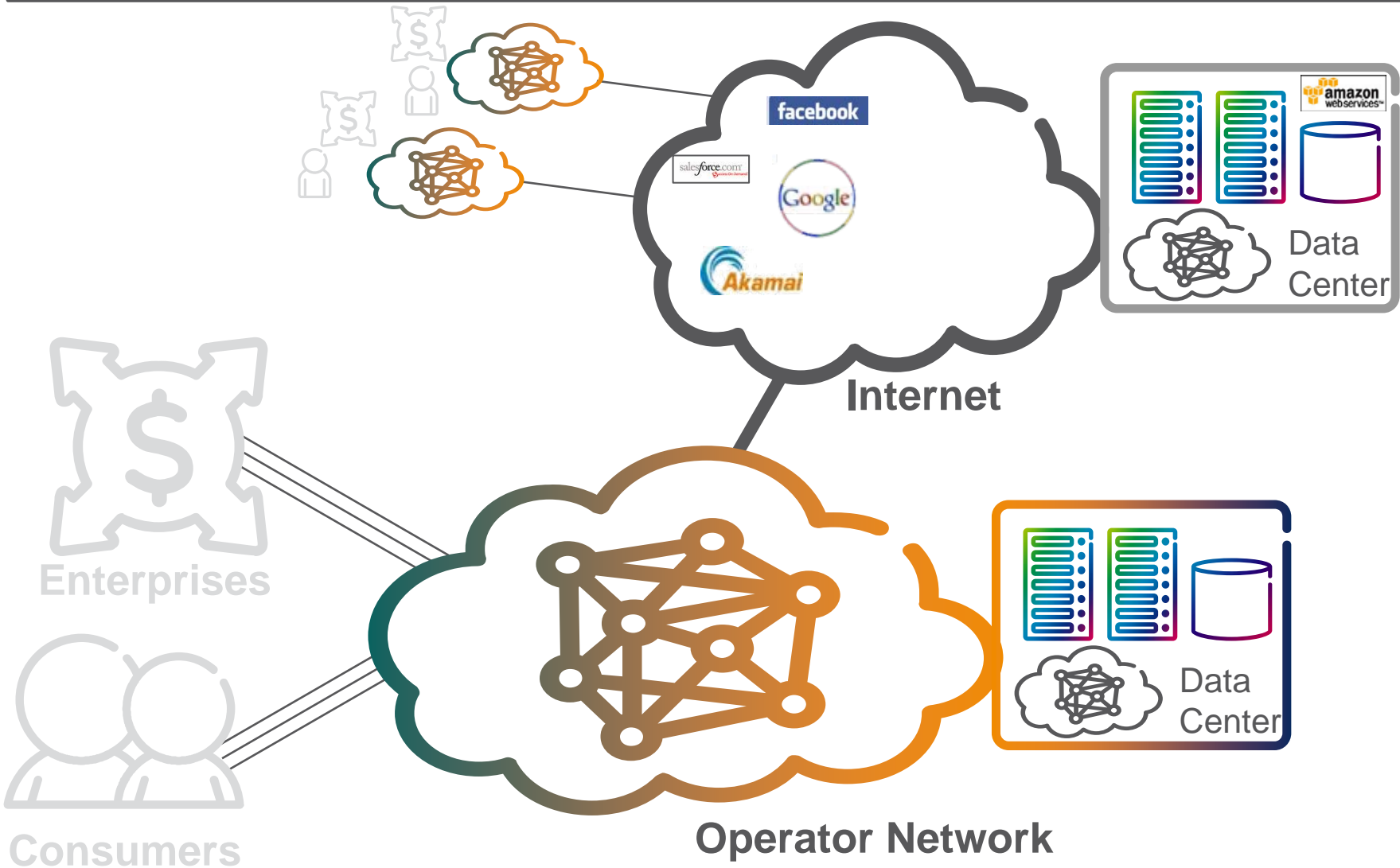
Phase 1 of Cloud Computing is about Data Centers (IT/Enterprise)

Phase 2 is about Consumers, Mobility & Operator

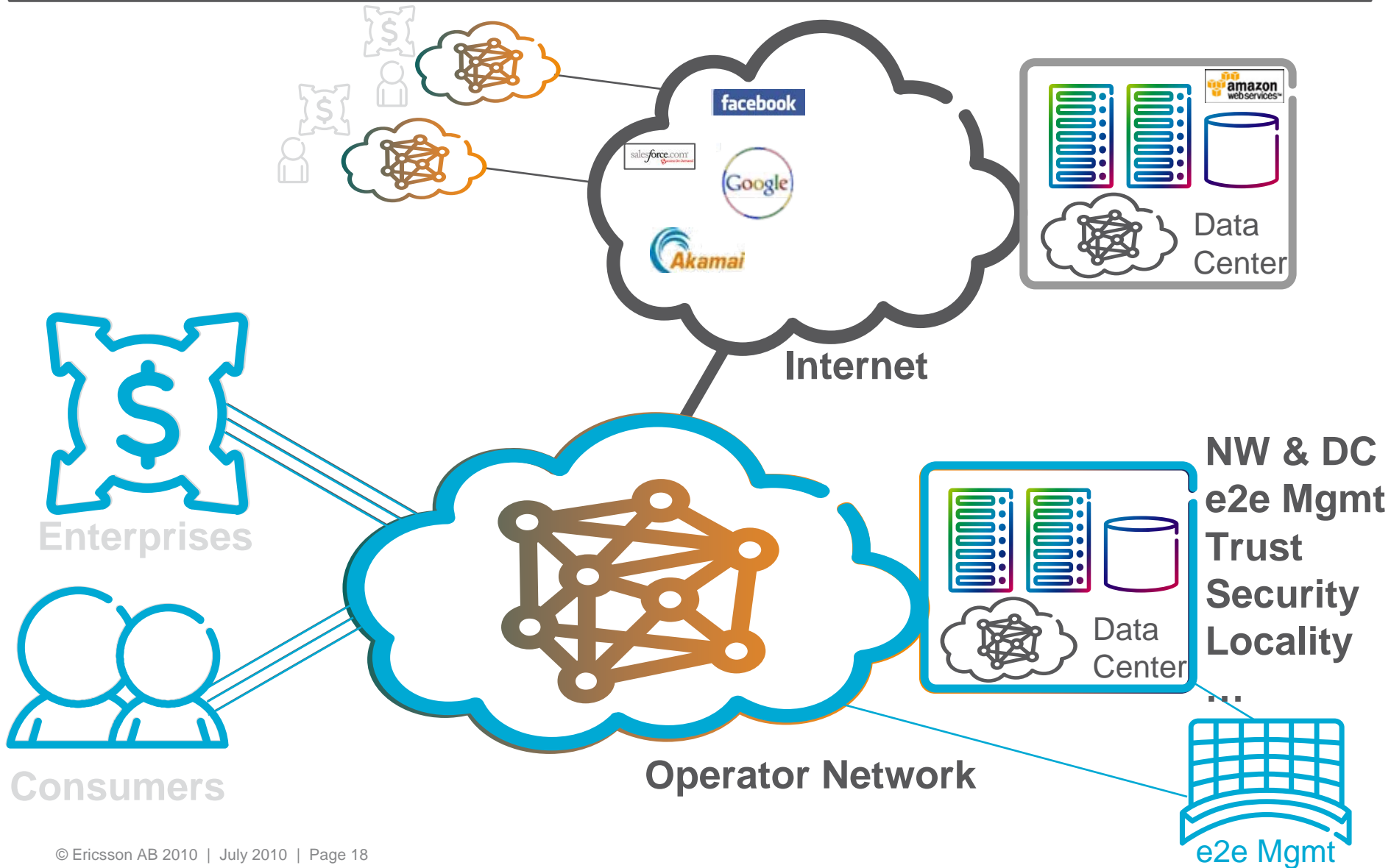
CLOUD LANDSCAPE - ENABLERS



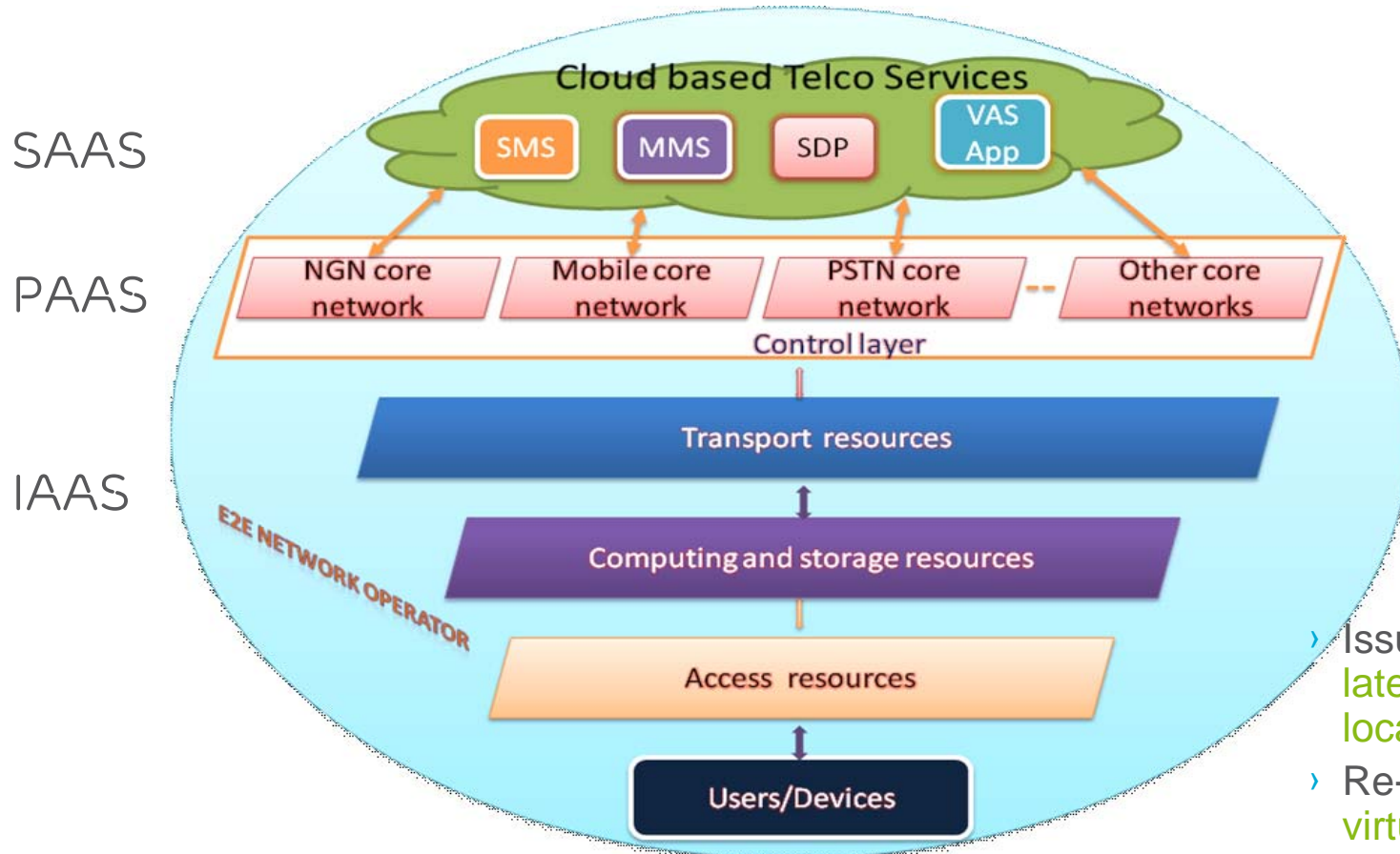
CLOUD SERVICE PROVIDERS



CLOUD SERVICE PROVIDERS: TELECOM CLOUDS

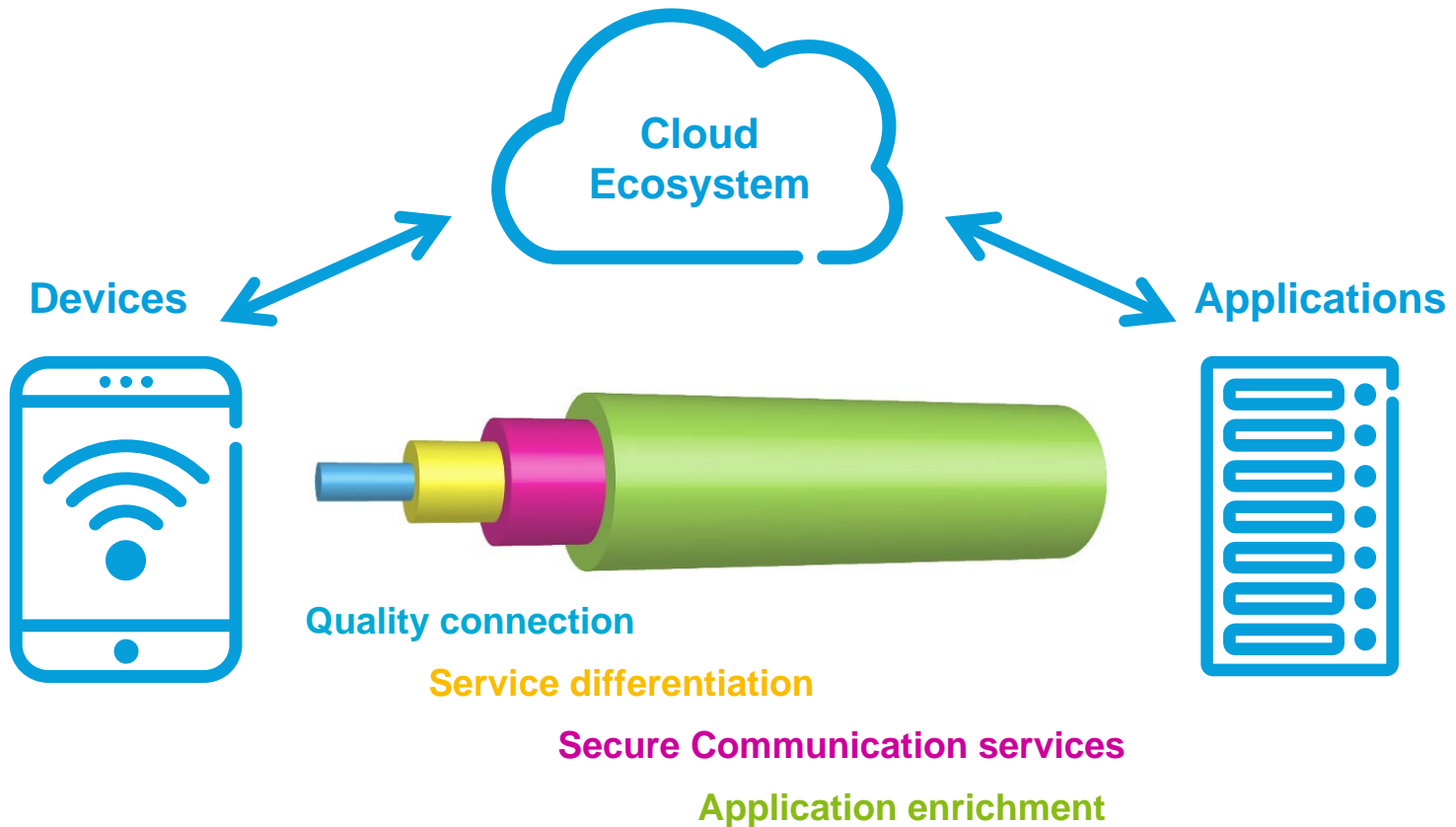


TELECOM SERVICES OVER CLOUD



- › Issues related to: latency, security, locality, SLAs
- › Re-using the same virtual image across clouds
- › Today's APIs to different cloud technologies are very different

CONNECTIVITY & END TO END VIEW



[SCREEN-2-SERVER IS THE NEW END-2-END]

3 KEY MESSAGES





ERICSSON