

A decorative graphic on the left side of the slide, composed of numerous small circles in various colors including green, teal, blue, and purple, arranged in a pattern that suggests a network or data flow.

Opportunities and Challenges with sdn to realize fully converged network

Mallik Tatipamula, Ph.d
Head of Ip and cloud technologies
Ericsson research silicon valley

drivers for sdn

service and business model transformations



Video growth



cloud



Mobile
Broadband



convergence



50 Billion

SOFTWARE DEFINED NETWORKING

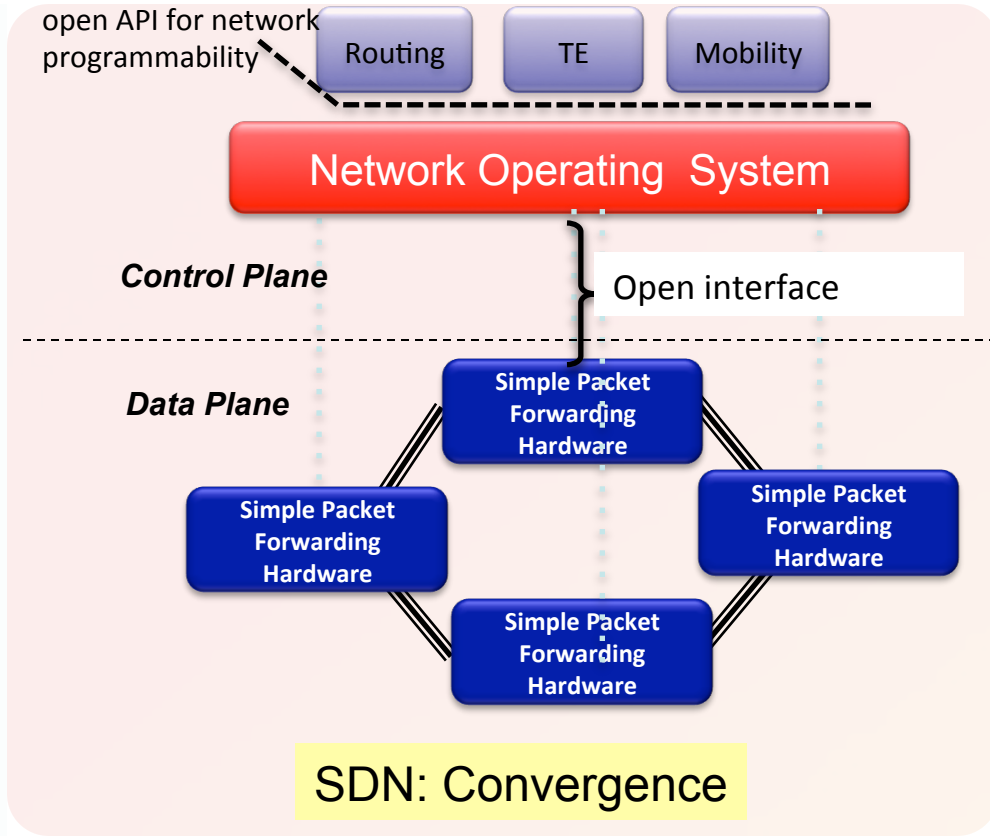
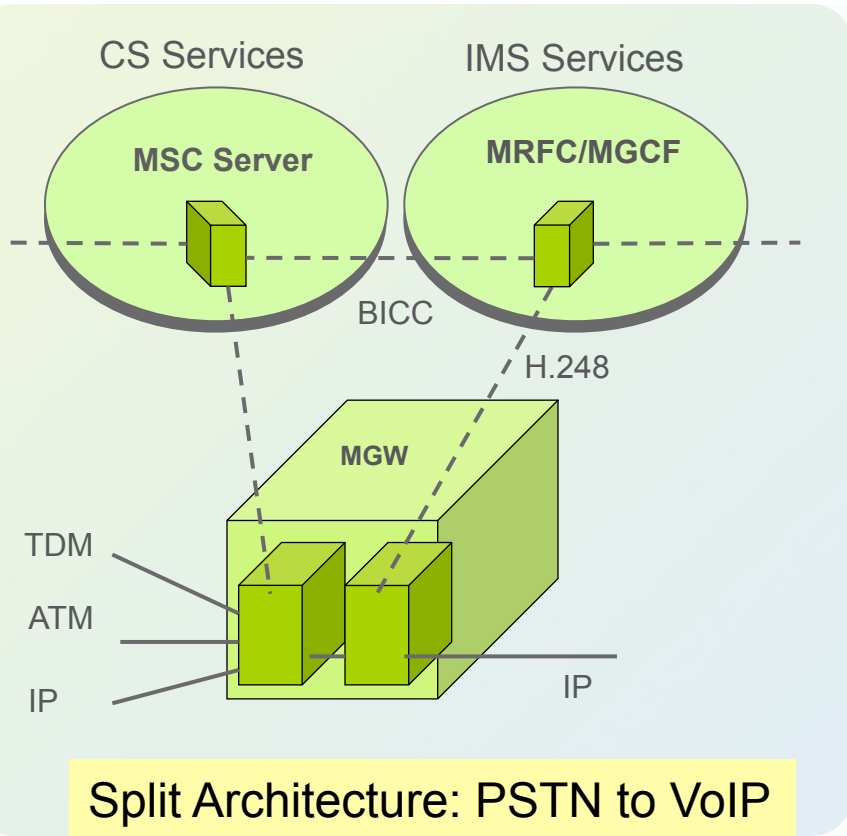
Economics

enablement

Experience

Ericsson is at the forefront

Learning from the past & developing the future



scale

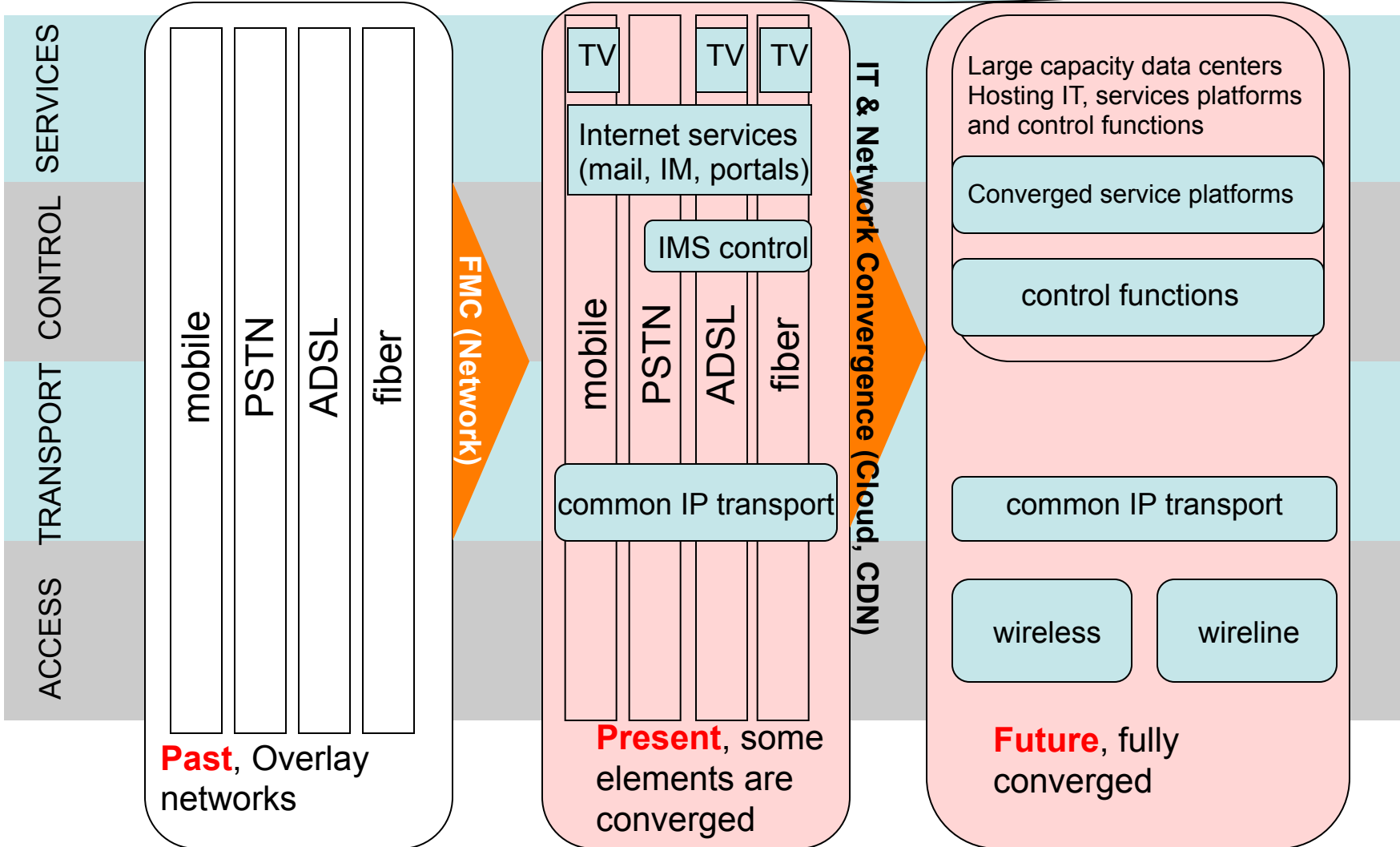
Service velocity

Programmability & Virtualization

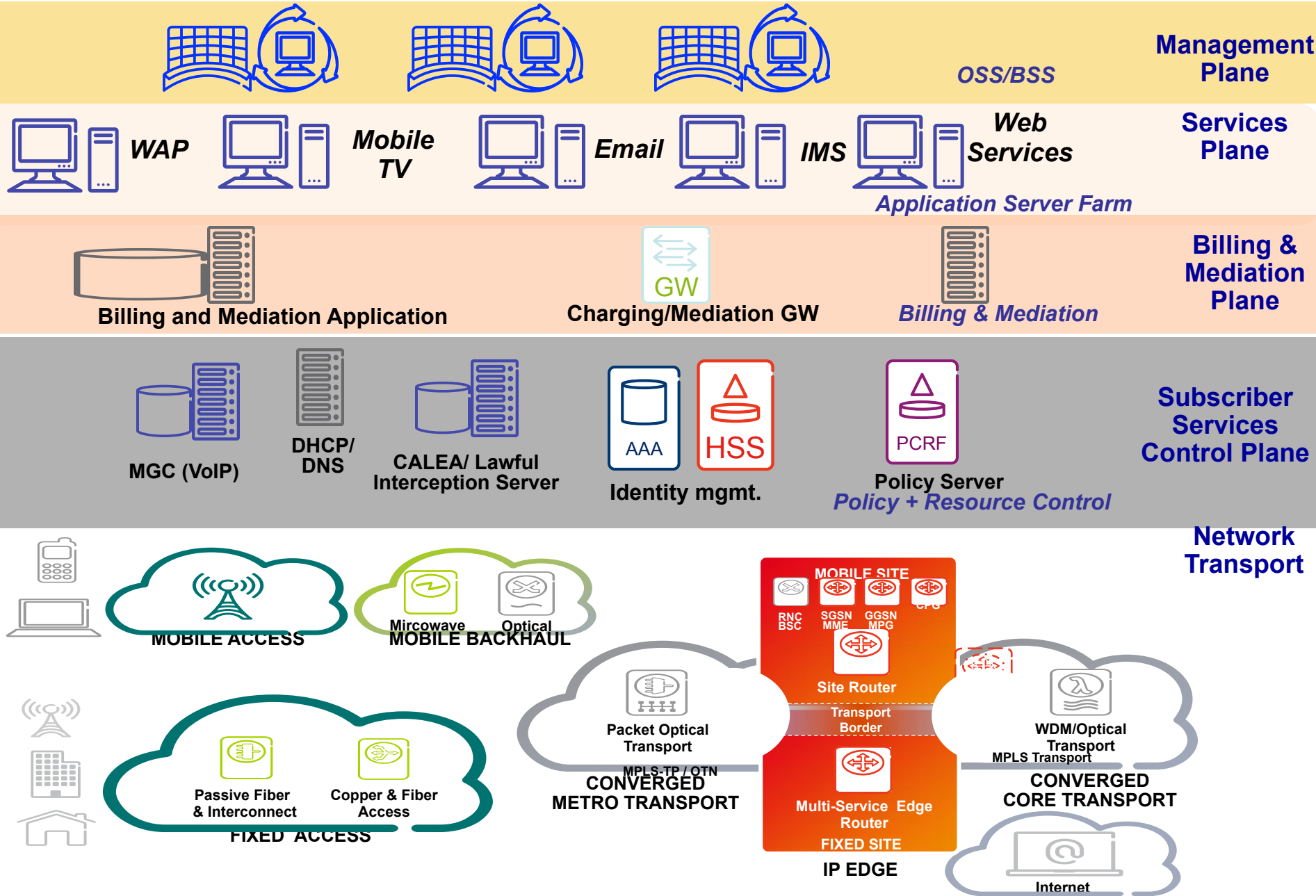
Past, present and future

EVOLUTION TOWARD FULLY CONVERGED NETWORK

SDN challenges and opportunities



Present network: Typical service provider network building blocks



future sdn based converged network: Investigations and prototypes

SMART

Simple
Example Use cases:

scalable

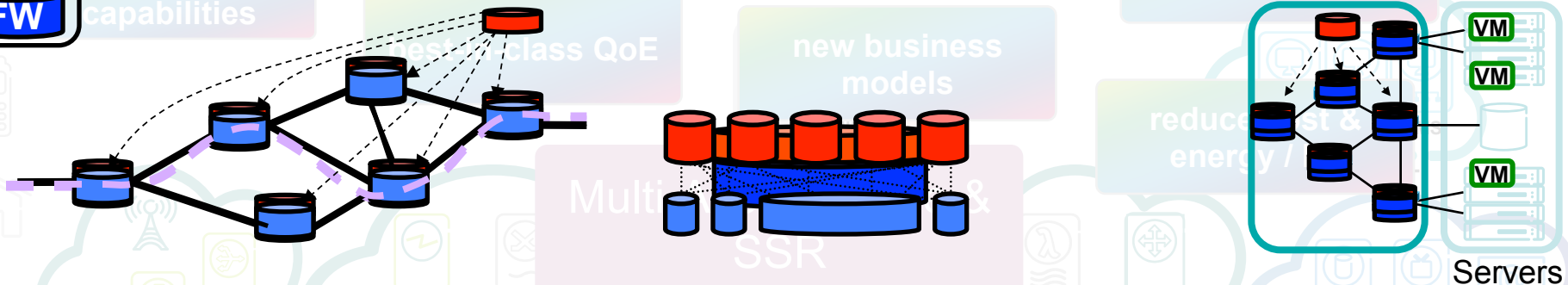
Legend:

Contr

FW

Aggregation:

Service Edge: Multi-Layer IP network Data Center:



Emerging new services and business models

Effect of cdn and cloud on overall architecture

Virtualization and programmability

Software defined networking

Architectural approach and prototype implementations

traffic MODELING

NEW FUNCTIONS (CACHING)

USE CASE SCENARIOS

REQUIREMENTS

CNTL & FWD FUNCTIONAL SPLIT

ECONOMICAL MODELING

RESOURCE VIRTUALIZATION

MIGRATION SCENARIOS

MULTI-CONTROLLER

CARRIER CLASS (MGMT, HT)

**Prototypes:
Access and Aggregation
cloud (Elastic Networking and Virtualization)**



ERICSSON