

SDN/NFV in 5G



Novemcer 6, 2019 | KT
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1 The Changes

2 SDN/NFV in 5G

3 Going Forward

The Changes: World 1st 5G

- Accelerating: Convergence Service
- Amplifying: Technology Synergy
- Associating: Neo Ecosystem

2020

'19.04



'18.09



'17.12



'16.12



'15.11



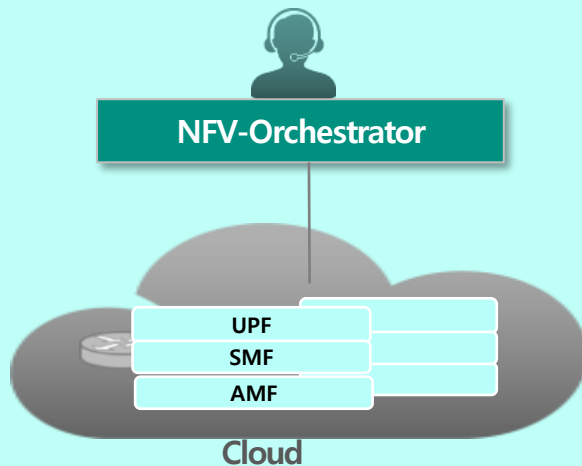
'15.03



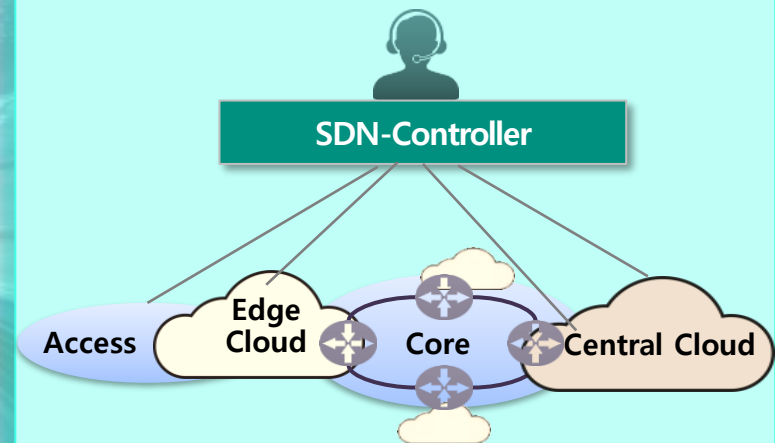
SDN/NFV in 5G

Virtualization Benefit: Agility, Efficiency, and Flexibility

① 5G Network Functions on NFV Cloud

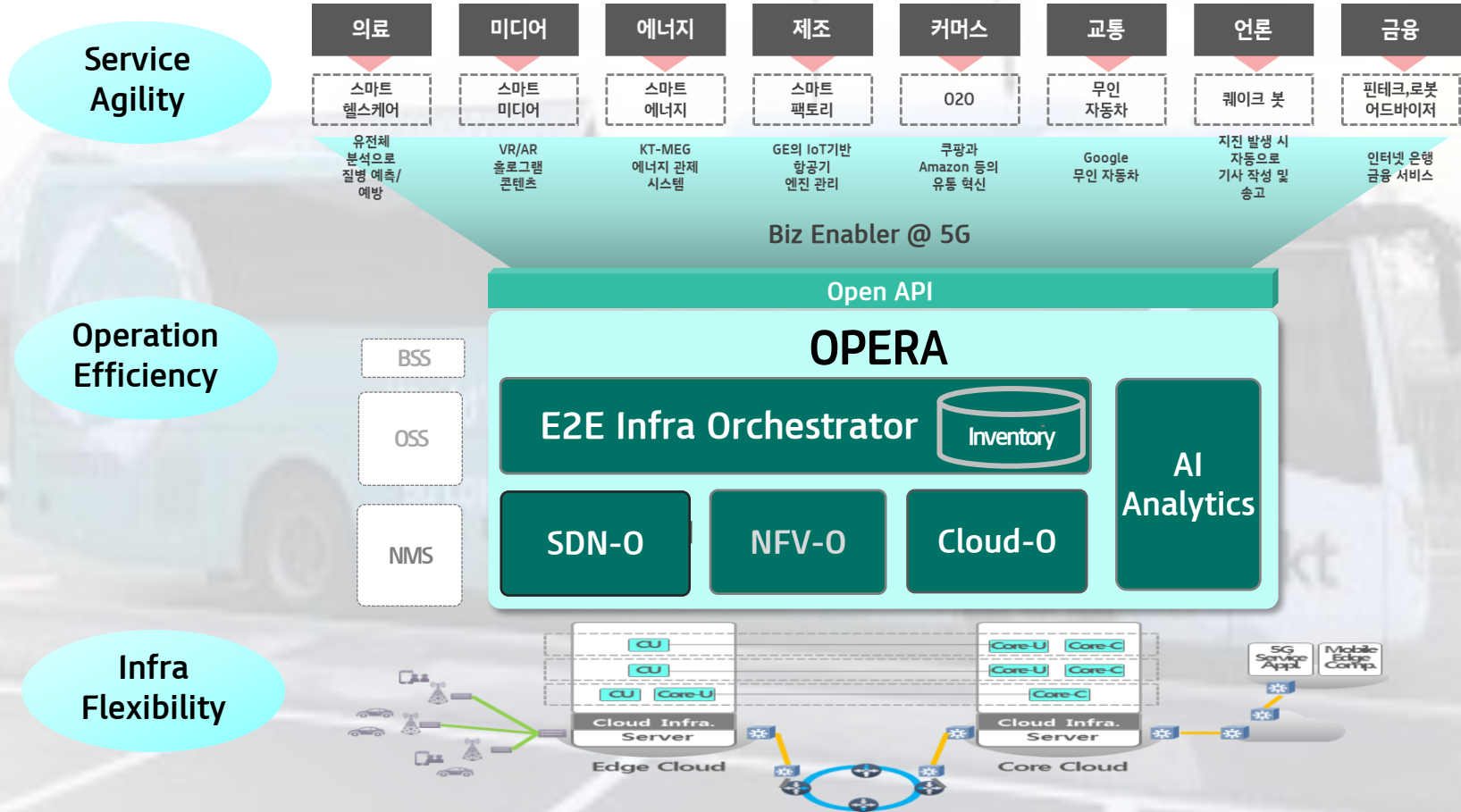


① 5G E2E Switches Controlled by SDN



SDN/NFV and Orchestration in 5G

OPERA: Orchestrator for Predictable, Elastic, Reconfigurable, and Automatic infra



Going Forward

Core competency comes from Standards, Intelligence, and Eco

Standards

✓ Organic Architecture



Intelligence

✓ Customer-Centric Services



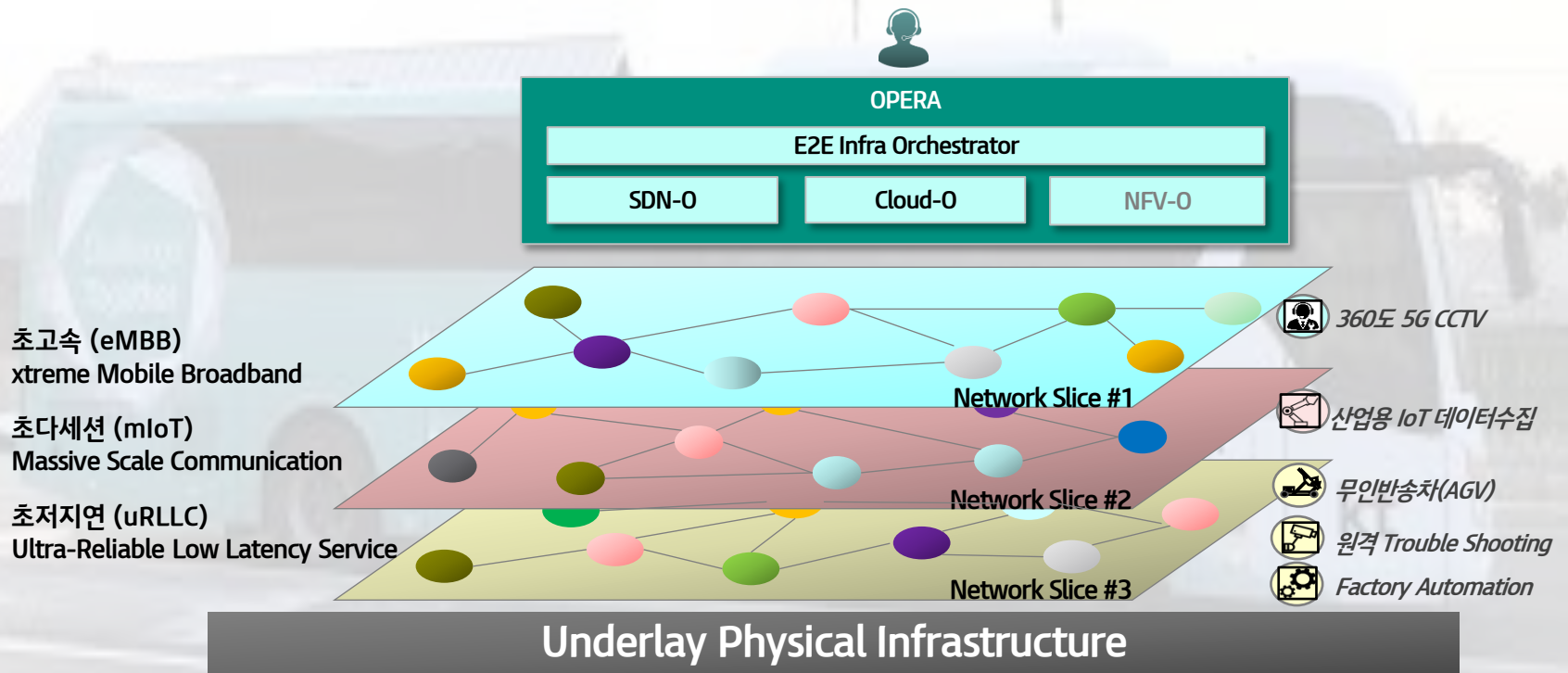
Ecosystem

✓ Make Success Story



Standard (1): From NSA To SA

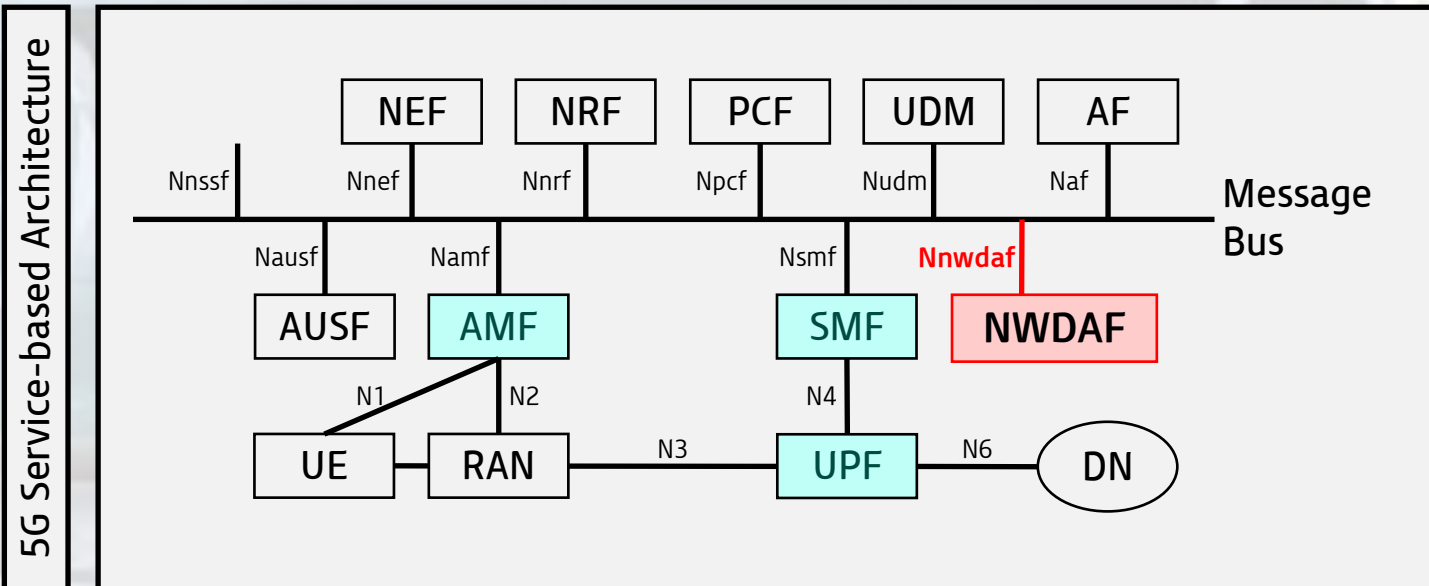
- ✓ NSA (Non Stand Alone) When 5G Starts
- ✓ SA (Stand Alone) Provisioning with NSSF(Network Slice Selection Function)



Standard (2): Service-Based Architecture

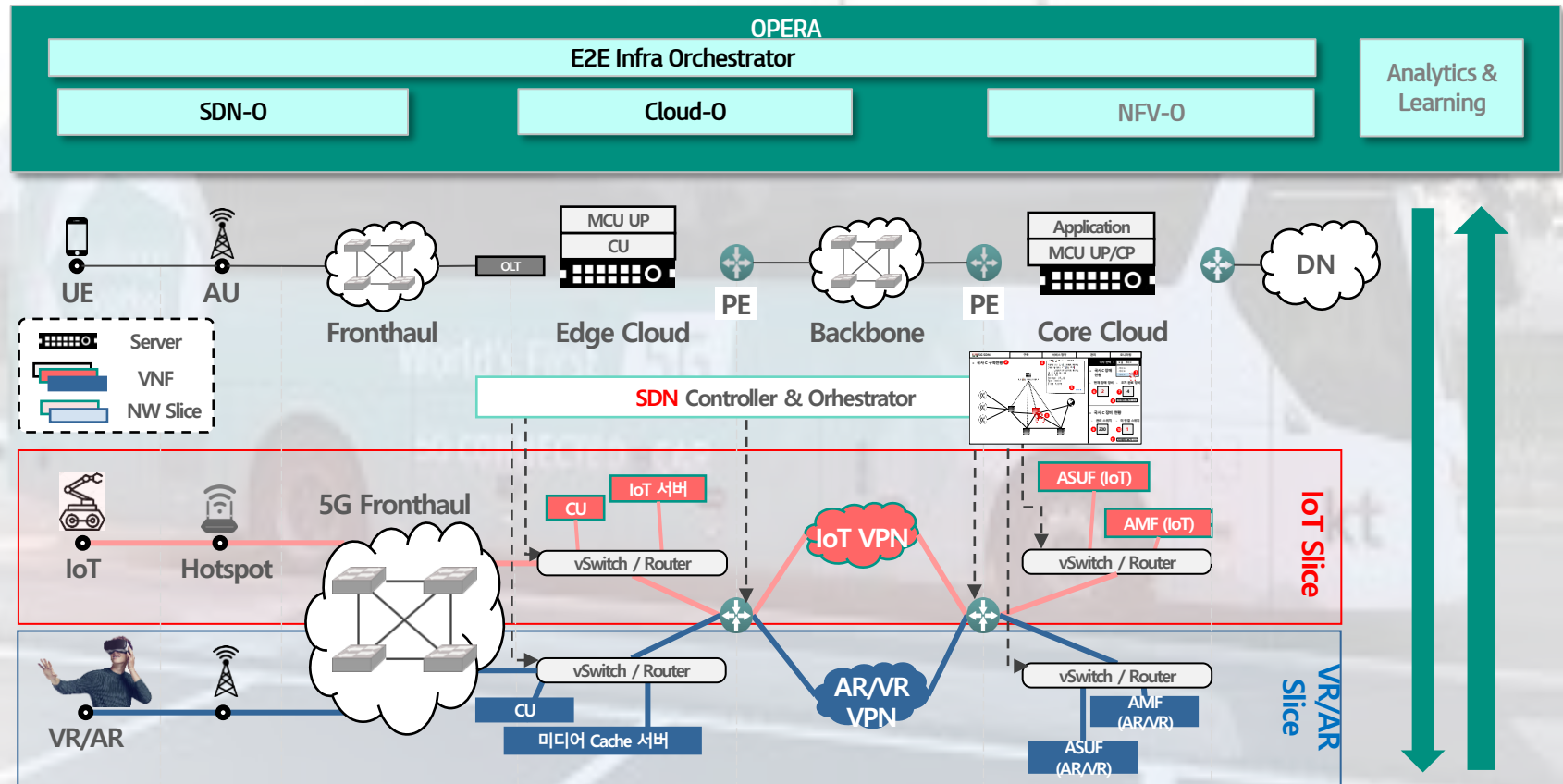
✓ NWDAF (Network Function Analytics Function)

- Network Data and Service Data Analysis
 - ➔ E2E QoS, Performance Analysis, Load Balancing,
 - ➔ Mobility Analysis
 - ➔ Network Congestion Information, etc.



Intelligence: AI Operation

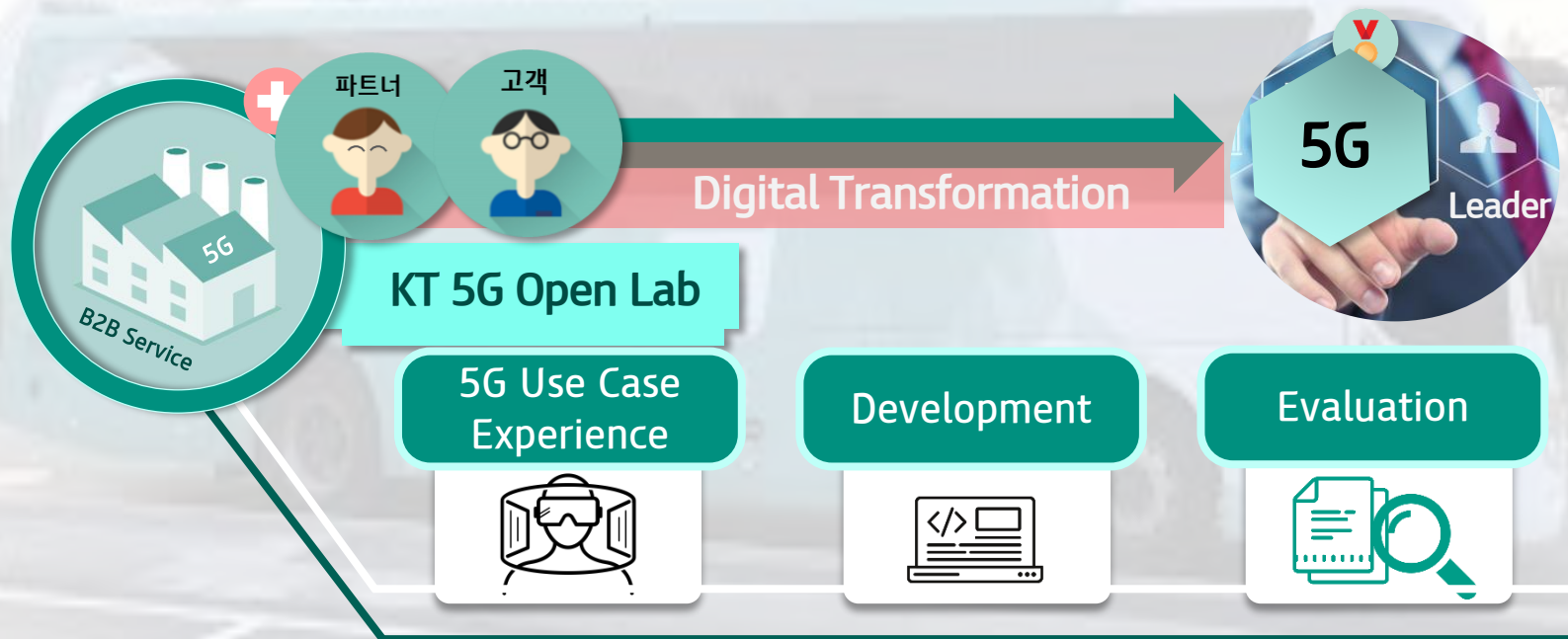
- ✓ Provisioning: Resource Optimization, Service Assurance
- ✓ Monitoring: Root-Cause Analysis



Ecosystem: Open API

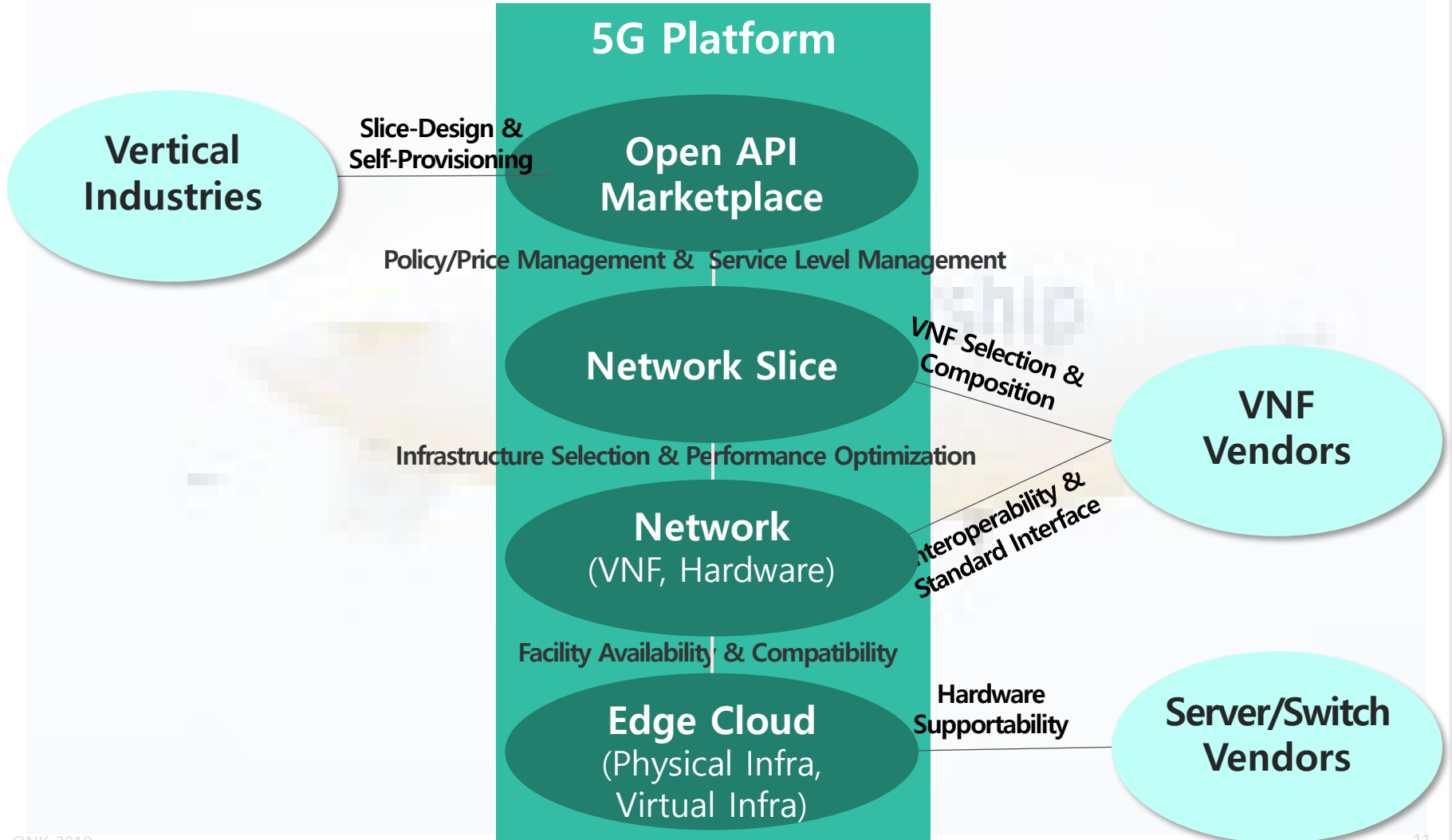
✓ Slice API Based on QoS Profile: Combination of Bandwidth, Latency, etc.

- 5G Use Case Experience on 5G Infra
- 5G Service Development & Evaluation
- 5G Service Improvement Opportunities



5G Open Ecosystem

- Different Players, Domains, Modules, and Interfaces over Standards



R&D Interest

1



Business Model

- New Open Ecosystem
- Service-Oriented Platform
- VNF(Virtual Network Function) Pools

2



Global Standardization & Open Community

- Multi-Vendor Interoperability
- Dynamic E2E Network Slicing

3



Technical Leading

- Scale-In/out
- High Availability
- Data Analytics
- Service Assurance
- Disaggregation (White Boxes, P4, etc.)

당신의 초능력

kt 5G