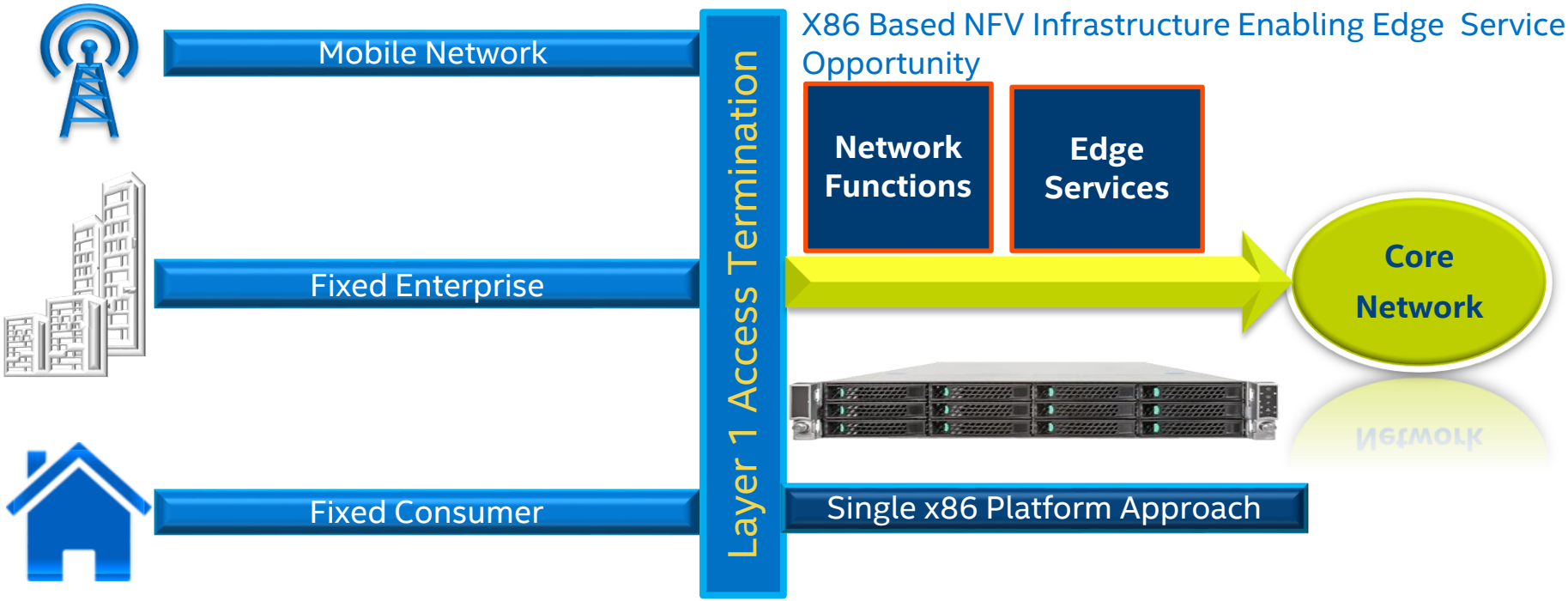
NETWORK TRANSFORMATION MULTI ACCESS EDGE COMPUTE & NEXT GENERATION CENTRAL OFFICE – NGCO

Alexander Quach -Alex Quach - Vice President & General Manager Wireline and Core Networking Division, Network Platforms Group

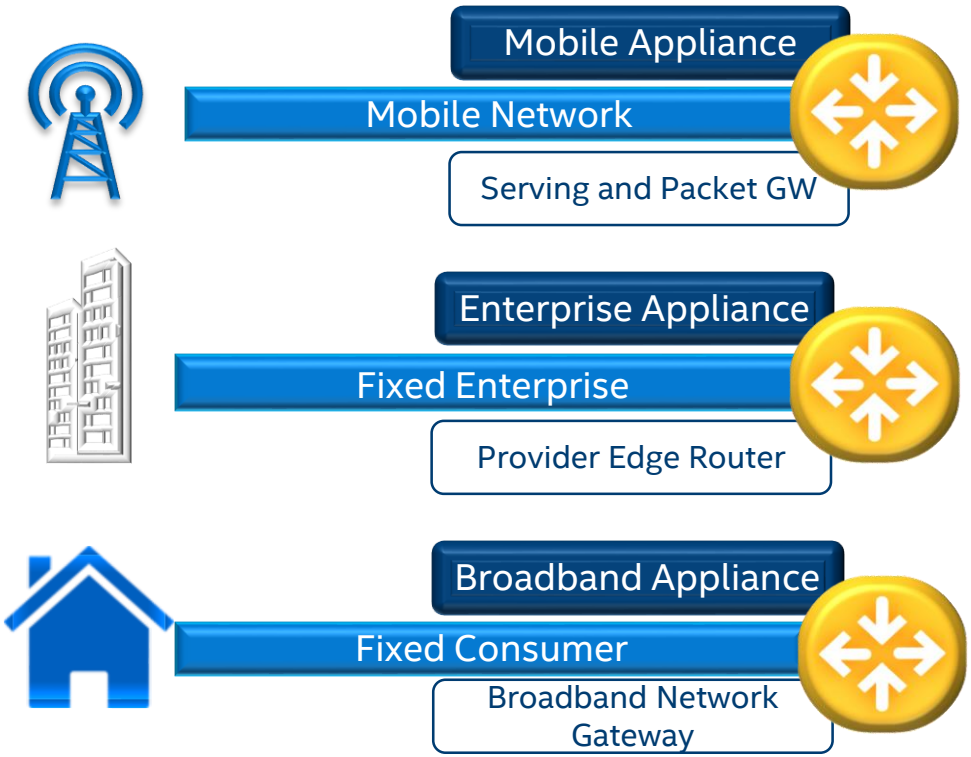
Intel Corporation

NGCO Platform Concept



Provide a Single Platform Approach for Edge NFV and Services

CoSP Problem Statement: Too Many Networks



- **Traditional Services Provided in HW**
- **Many Different Networks**
  - CapEx Nightmare
  - OpEx Nightmare
  - Service Stagnation

Core Network

Multiple Networks Delivering Similar Services – ARPU Dropping

VNF Performance on NGCO

vBNG/vCPE USER PLANE

netElastic systems · Juniper Networks · NOKIA · 6WIND · casa systems

300G 2xS

UPF

affirmed · NOKIA · HUAWEI · ERICSSON

193G 2xS

Fixed Wireless Access (Fixed UPF)

500G 2xS

metaswitch

NGCO on IA Server platform

Intel® Select Solutions for NFVI and universal Forwarding Plane

CMTS

casa systems · CISCO · harmonic · COMMSCOPE

CDN

OTT caches drive ~60% of traffic on network

Netflix, YouTube, services ~ 90% cache efficiency

Other names and brands may be claimed as the property of others.

Re-Architecting Next Generation Central Office

NFVI Solutions

ERICSSON	HUAWEI	NOKIA	CISCO	ADVANTECH	QCT Quanta CLOUD TECHNOLOGY	DELL	Hewlett Packard Enterprise
HDS8K	CH121	Airframe open edge	UCS	SKY-8201	Quanta Grid D52BQ	Dell Power edge R740	Prolient DL560 G10

150G-200G per socket BW **Balanced IO configuration**

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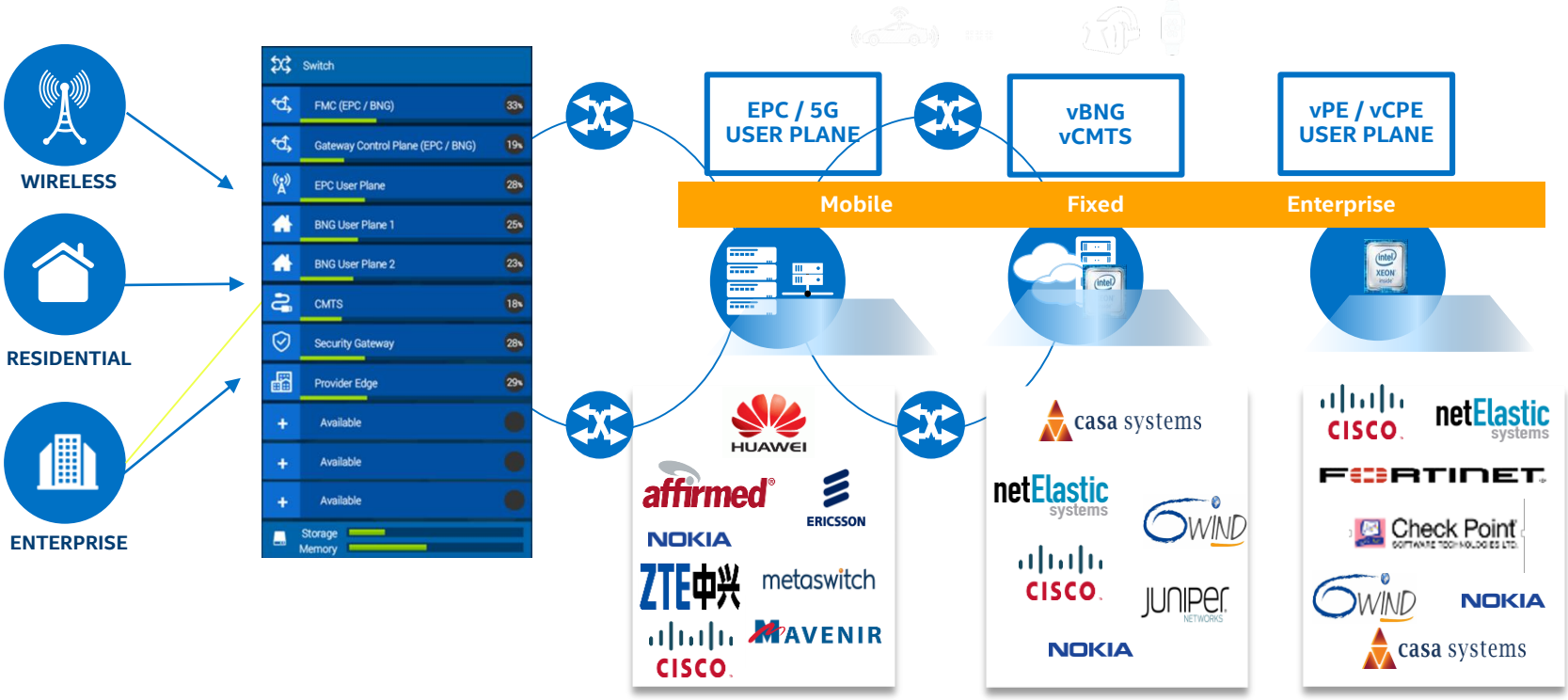
Re-Architecting Next Generation Central Office

Example VNF vendors



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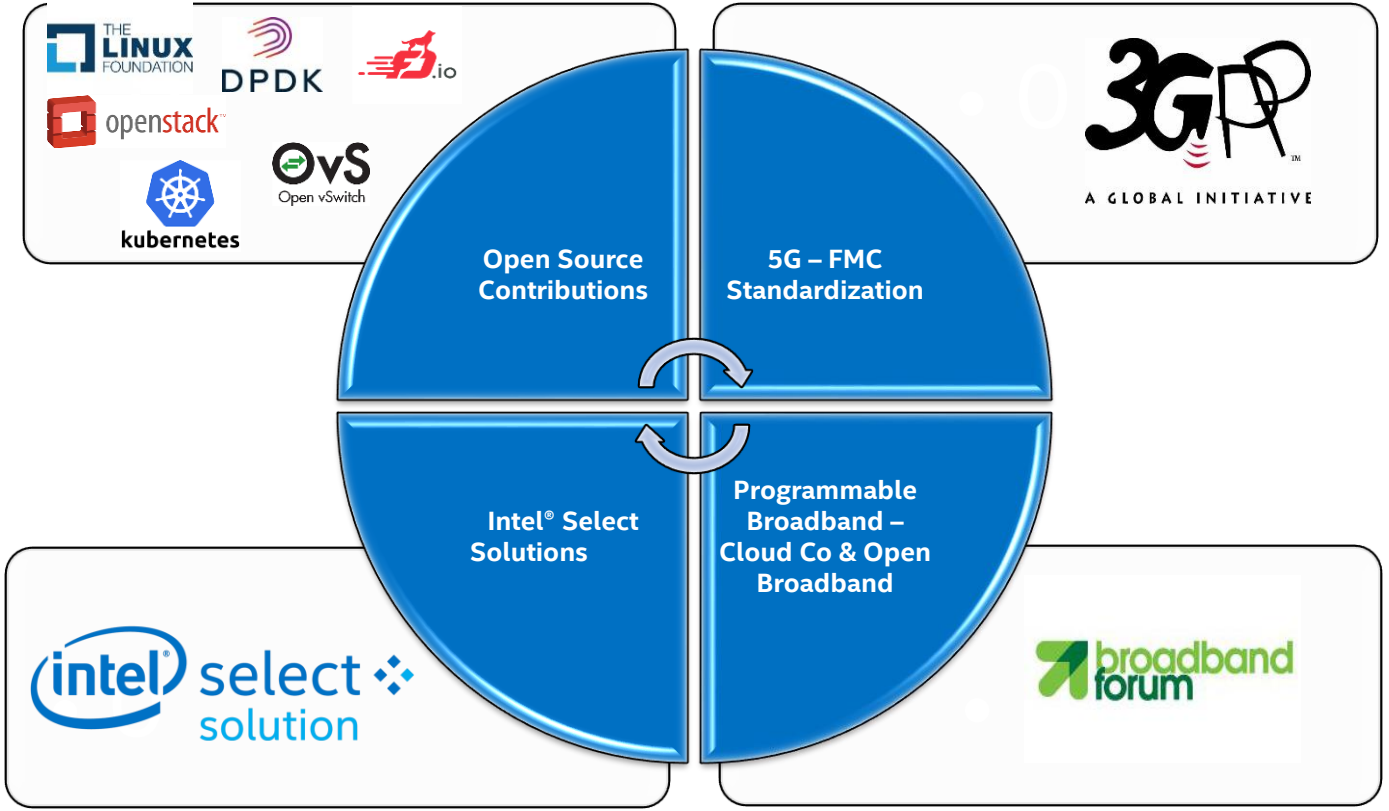
Standards – Ref Designs- Open Source Contributions



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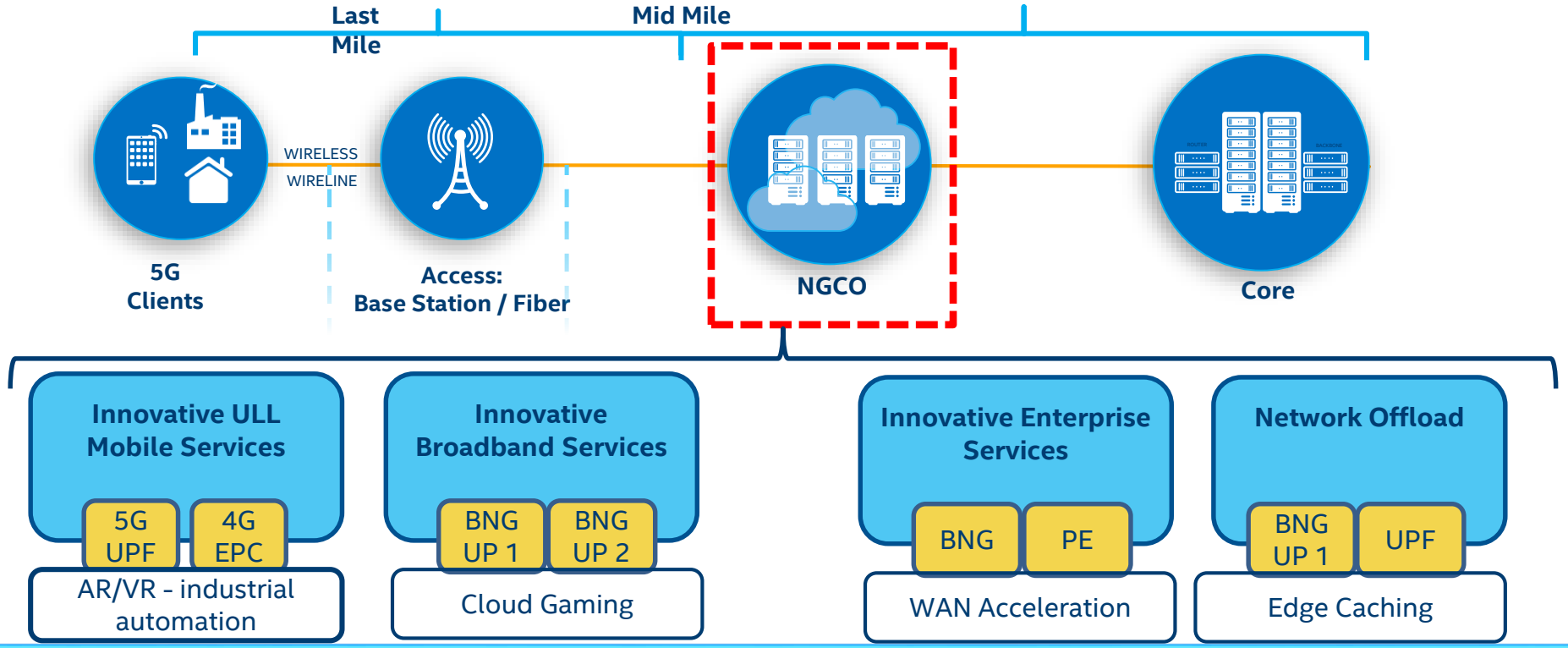
Use Cases: New Services



Summary & Call to Action

- CoSPs currently maintain separate NWs
- Converge on single NGCO architecture
- Power & Cost savings, unlock Innovation
- Work with Intel to re-architect the Central Office to take advantage of the 5G future.

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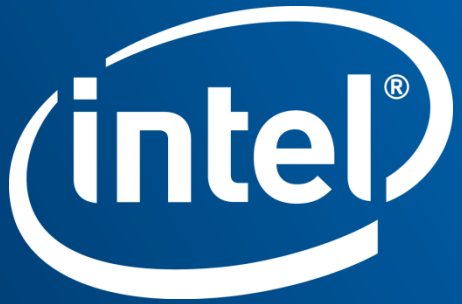
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