

ZTE

# ZTE Common Core Experiences Sharing

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# ZTE Common Core to Provide All Access Ability Oriented to 5G

## Challenges

Multiple Cores

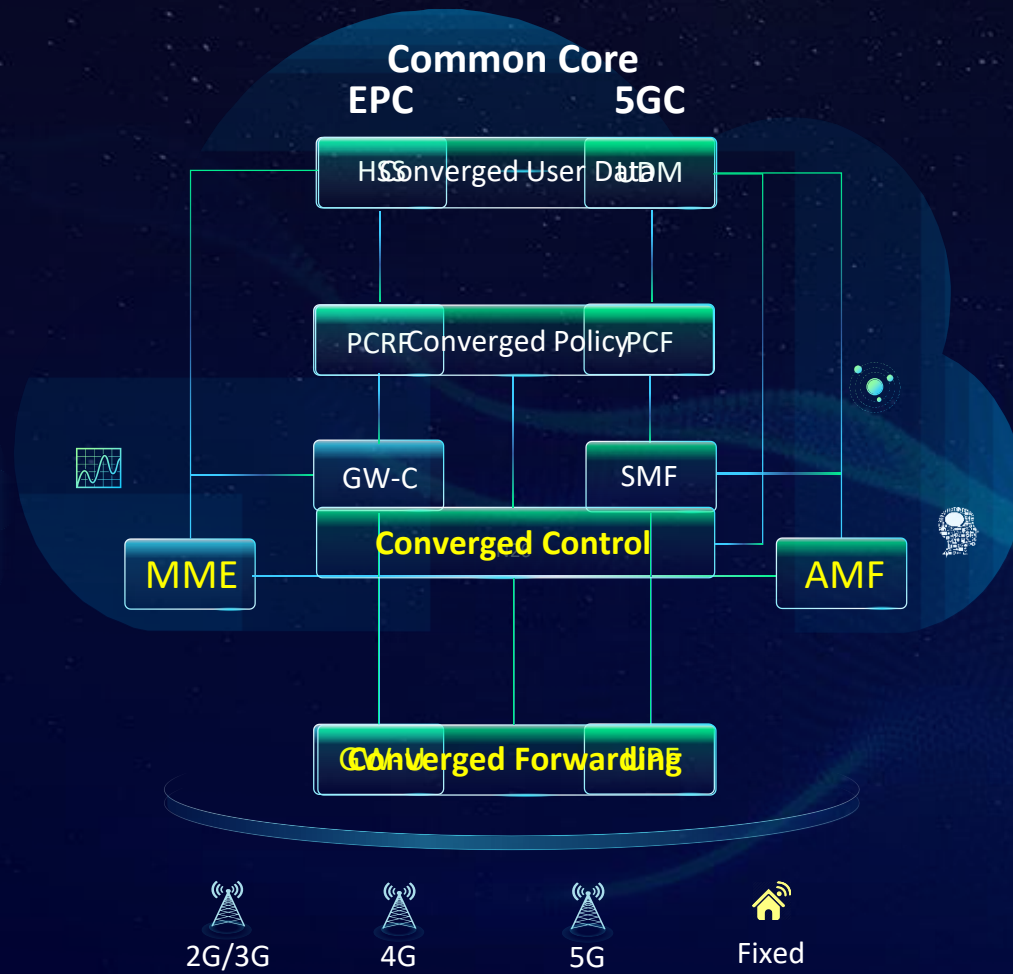


EPC + 5GC

Overlapping Investment



Complicated O&M



## One Core

KPI  
**20%** ↑

2G/3G/4G/5G/Fixed full convergence  
Reduce signaling & latency

## Target Architecture

Investment  
**40%** ↓

Support both SA and NSA, no repeated upgrade  
Reusable resource

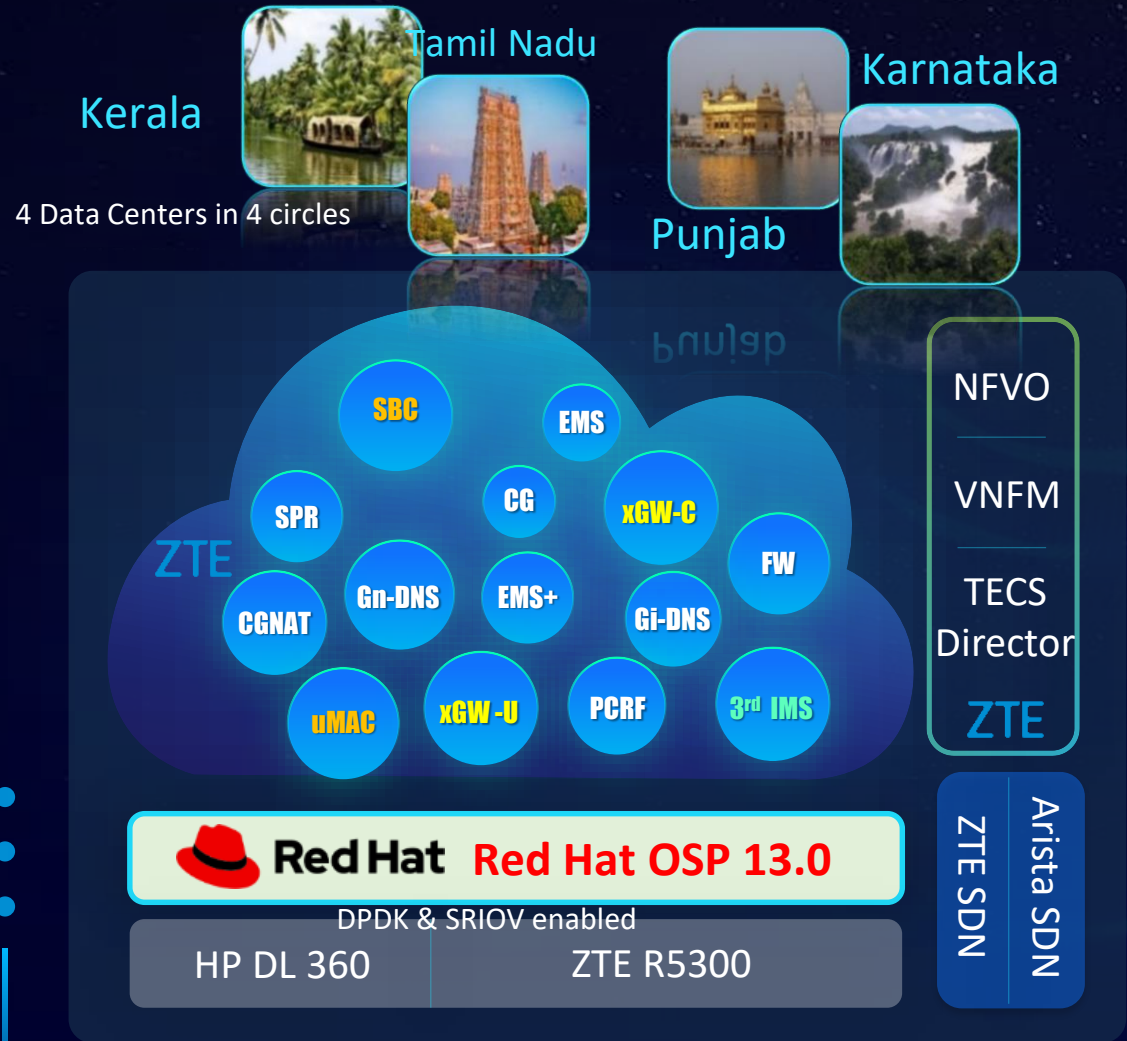
## Simplified O&M

Efficiency  
**2X** ↑

DevOps-based rapid service onboarding  
AI-based self-optimization & autonomy



# Vodafone Idea: Selected ZTE for vEPC & vSBC



Large Scale (1Tbps), Cascade CPU + Dual 25G NIC + SR-IoV



MEC-oriented CUPS architecture, to make smooth evolution to 5G



Pre-integration in Openlab & deployment with AIC, to reduce TTM  
The First Call was finished in 2 weeks



Unified O&M of Cross-DC and heterogeneous cloud Platform  
by TECS Director

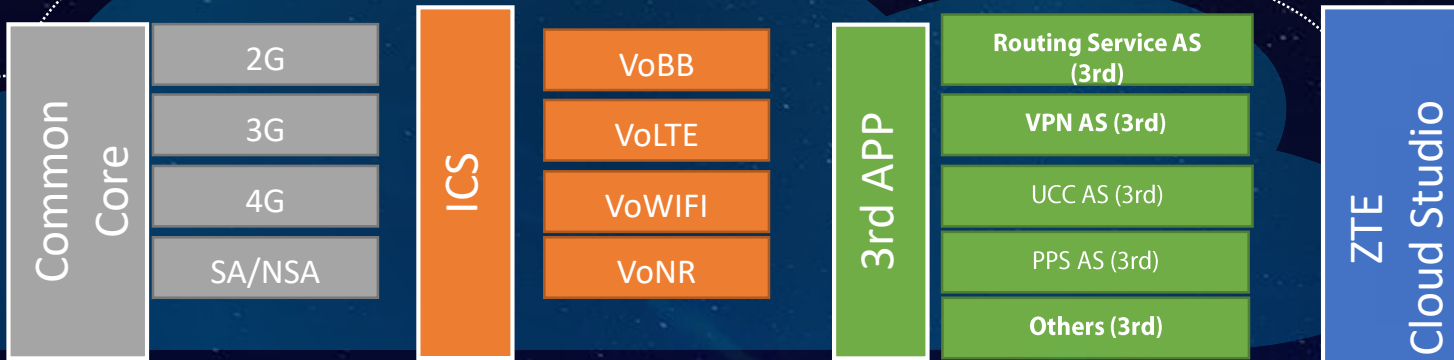
Pre integration in ZTE OpenLab reduces commercial deployment risks by 80%



# Network Transformation with Hutchison Drei Austria



## TELCO CLOUD (ZTE)



VIM ZTE TECS



ZTE COTS

Ceph

## Virtualization · Cloudification · ICT

### Service Level

Routing Service AS (3rd)

MNP AS (3rd)

VPN AS (3rd)

UCC(3rd)

MPBX(3rd)

CS (ZTE)

MSC

MGW

EPC(ZTE)

xGW1

.....

xGWn

MME

Legacy IMS (3rd)

TELE2 PSTN

PSTN/NGN

IAD/PBX/POTS...

Fixed



- Multiple VNFs on Unified Cloud Platform
- Hyper-Converged Infrastructure and Large-Scale Distributed Cloud Storage (1000T) by CEPH
- E2E Automated O&M, Rapid Deployment, Intelligent Troubleshooting
- ZTE is the SI for this project.
- 5G NSA commercial, SA is on delivery
- Over 10 Years Cooperation
- 2/3/4/5G and Fixed Converged
- One Voice VoWifi/VoLTE/VoNR
- Step By Step on Cloud

# Deploy 5G SA Core Network for China Mobile

Vi

H3A

China  
Mobile

## 2C



- ◆ Control plane: won **6** among **8** regions
- ◆ ZTE won the bid for nearly **30%** shares in **12** provinces, including Shandong, Anhui, Fujian, etc.

**40M**

Capacity

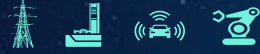
**34Tbps**

Throughput

**35%**

Share

## 2B



- ◆ **31 provinces**
- ◆ **9M** capacity, **1.25Tbps** throughput



2B



2C&2B

**ZTE takes the lead and outperforms other vendors in China Mobile's 5GC test with 3200+ items**

(function, performance, network management, slicing, security, networking, IOT)



# Simplified UPF to Precisely Handle 2B New Challenges

## Typical Requirements on Edge

### Local Application *"Low Cost"*

Industry Park, enterprise apps are closed-loop locally

### Network Function *"Lightweight"*

Application layer, Virtual Layer Lightweight  
Capable of Edge enhancement

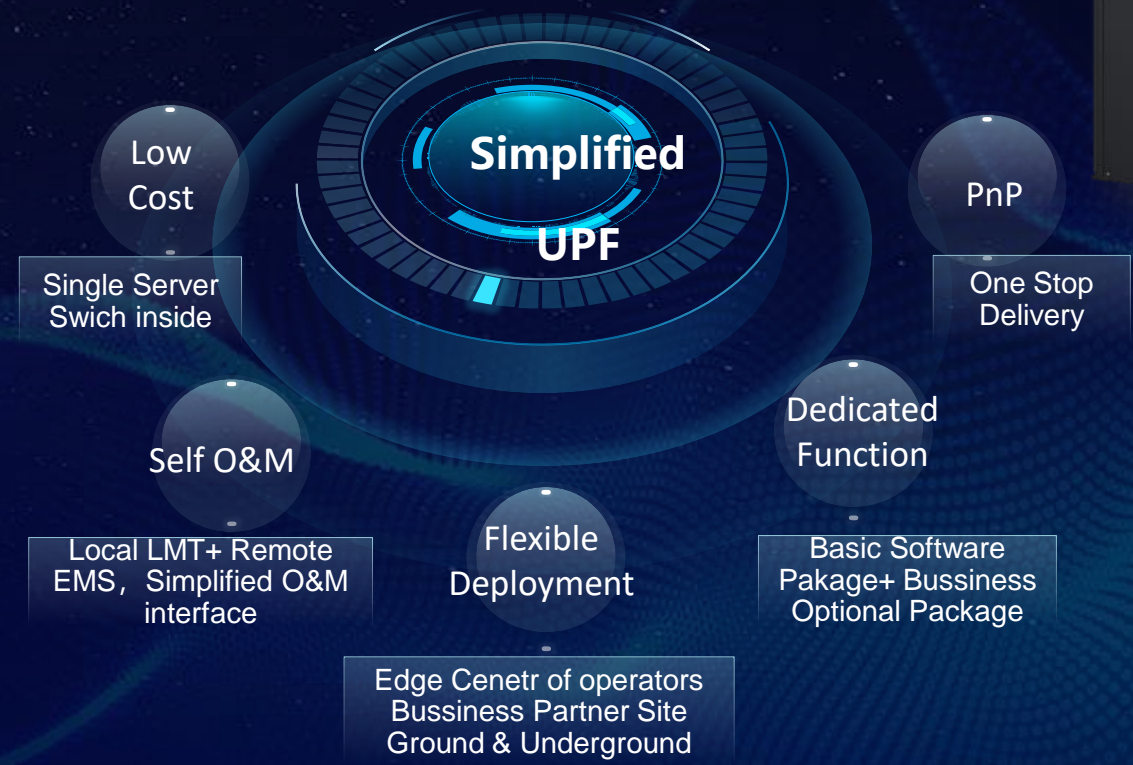
### Deployment *"Simple&Flexile"*

From Center to Region

### O&M *"Easy & Agile"*

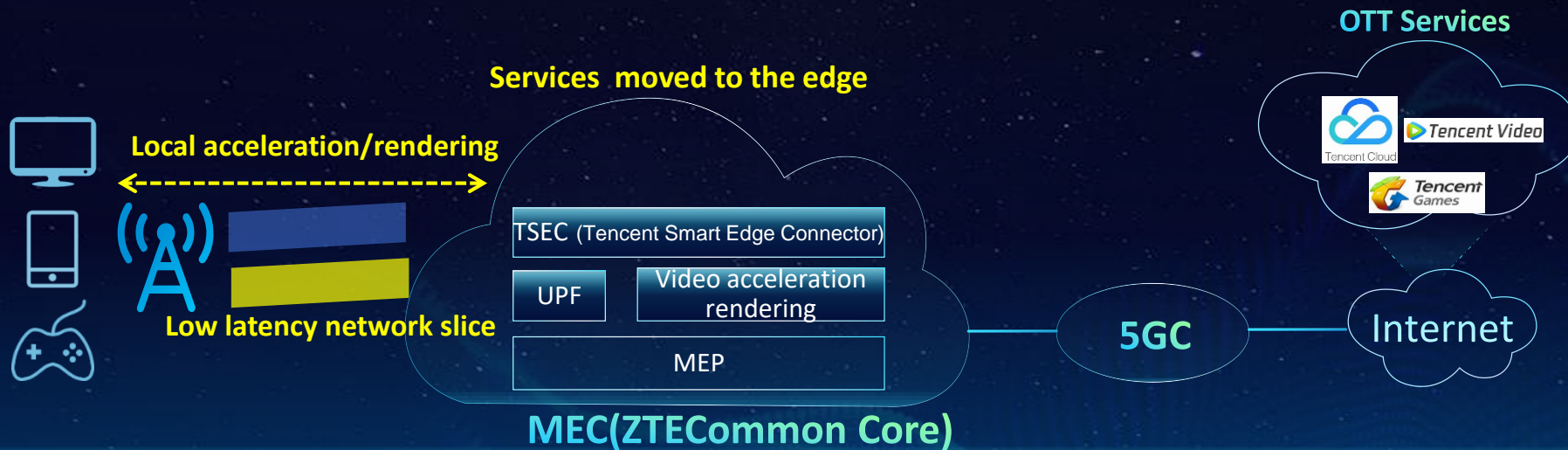
uRLLC must be matched in edge

**Low Cost, Easy Deploy, Simple O&M, Dedicated Function**





# MEC-Based Cloud Game (Guangdong Mobile + ZTE + Tencent)



MEC (6-10 ms)




Cloud (60 ms+)

"MEC Edge Cloud" and "Public Cloud" collaborate to create online game experience with high quality.

# Fostering an Open and Win-Win Ecosystem

 <p><b>SDN NFV World Congress 2019</b></p>	<p>Common Edge 5G Excellence</p>	<p><b>AWARDS</b> Edge Computing Congress Awards 2019</p>	<p>Slice Store for MEC The Greatest Commercial Potential for Edge Computing Concept</p>
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 <p><b>5G World 2019</b></p>	<p>5G Slicing Wholesale Solution Leading Contribution to Network Slicing</p>	 <p><b>5G MENA 2019</b></p>	<p>5G-Oriented Core Network Evolution Solution Best Telco Digital Transformation</p>
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 <p><b>SDN NFV World Congress 2018</b></p>	<p>Common Core Best New Cloud-Native VNF</p>	<p>4MIX Distributed Cloud Best New Cloud Infrastructure</p>	<p>CloudStudio Best New Automation &amp; Management</p>
	<p>TECS CloveStorage Best New Open Source Product</p>	<p>CO Re-Architecting Solution Best New Edge &amp; Access Solution</p>	<p>vBRAS Best Network Edge</p>


**Platinum Member**






**Gold Member**



Enabling CSP Digital Transformation




Leading Player in All Areas of NFV Development  
Leading 5G Core Vendor







Very Strong in NFVI/MANO/vIMS/vEPC  
Leader of 5GC/G-VNFM



# ZTE COMMON CORE to Accelerates 5G Commercialization

## ZTE: Your Strategic Partner

### ✓ Technology Innovation

Convergent Core on SBA, Cloud Native, Container, Microservice architecture based on DevOps ...

### ✓ Dedicated Network Design

Integrated & Simplified UPF, HW Acceleration, Slicing, TSN...

### ✓ Precisely Support 2B Service

Business applications, Vertical Enhancement with precise CN

## Win-win

### ✓ Strategy & Technology comply

### ✓ Open Attitude

### ✓ Full Cooperation

### ✓ Win-win

ZTE

Thank You!

