

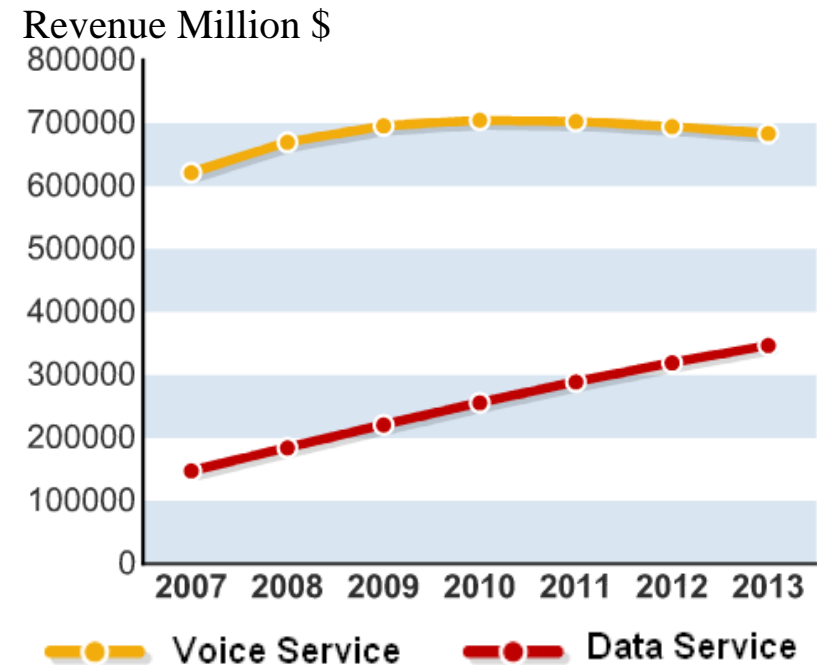
# Maximizing Revenues Across Unified Access Radio Networks

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ZTE

*Talking to the future*

# Global Service Revenues

- **Voice is the foundation for network revenues**
  - Reason is Coverage, Roaming and Terminals
- **Reduction of Voice ARPU**
  - Operators seek new data service revenues
  - Need for Multi-standard and Multi-RAT coexistence
- **Challenges for Multi-Standard, Multi-RAT**
  - How to manage multi-bands and multi-system ?
  - How to refarm existing spectrum ?
  - How to increase network capacity?
  - How to Maximize Revenue?



Source: WCIS

- ✓ **How to deal with the uncertainty during network development ?**
- ✓ **How to reduce TCO while operating 3G and 4G networks?**



- ✓ **How to guarantee the service continuity of 3G, 4G services?**

Terminal

Roaming

Capability

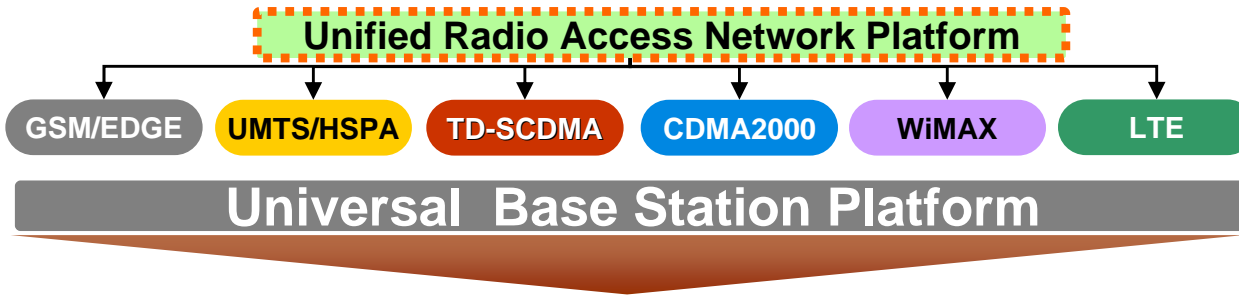
Evolution

Bandwidth

Services

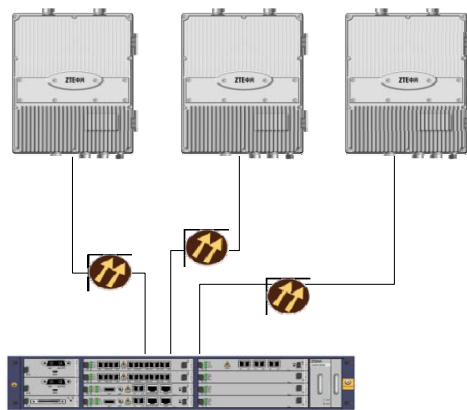
Coverage

# Ease of Deployment and Migration with Unified RAN

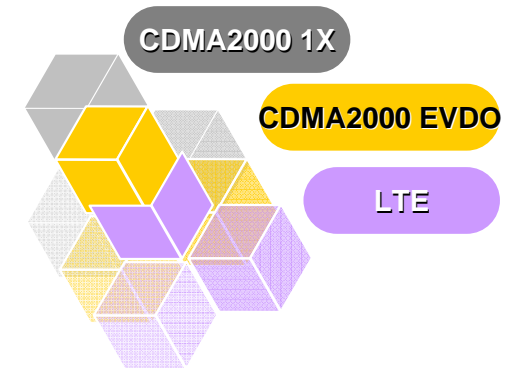


Distributed

Integrated

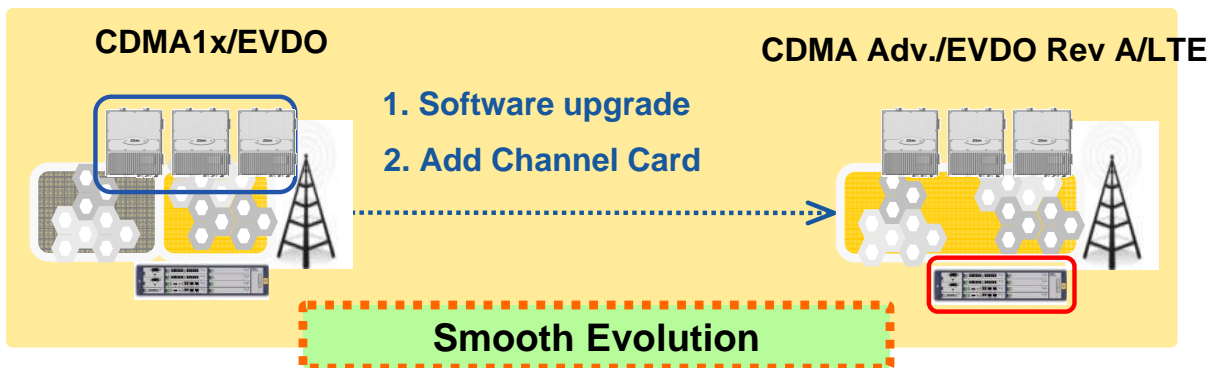


OneNetwork Target



Features

- ❑ Multi-Standard support
- ❑ Shared resources
- ❑ Flexible deployments
- ❑ Smooth evolution



# Manage TCO with Unified RAN – Reduce CAPEX & OPEX

- Co-sites, co-cabinets, co-radio units
  - Reduce foot-print
  - Reduce power consumption
- Co-feeder cable and co-Antenna
- Co-Backhaul
  - CDMA and LTE backhaul aggregation
  - Backhaul sharing for CDMA and LTE
- Smooth Network Evolution
  - Software uploads only
  - Minimal or “NO” hardware addition

## Investment Protection → TCO

### Reuse/Share

- Site
- infrastructure
- Backhaul
- Spectrum



**Maximize utilization of network resources and “Minimize cost per Mbps”**

# 4G Revenue Streams

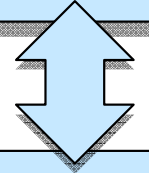
Permanent Sync:DL/UL 1-2Mbps

Mobile TV

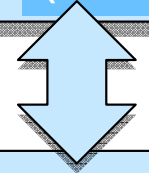
Live Video/ Video Blogging  
DL 6-8Mbps/UL 2Mbps

HD Video conferencing

HD Video Streaming  
(720i or 1080i) DL 6-10Mbps



## Unified RAN



# 3G Revenue Streams

Voice  
SMS/IM/Email  
Web Browsing

MMS/Picture  
Messaging

Online Gaming

Healthcare

Video on Demand

Video  
conferencing

Location Based Services

Mobile Music

Mobile  
Commerce

M2M Services

# Service Continuity of 2G, 3G, 4G Services

*Service Continuity → Guarantees seamless inter-working for CDMA and LTE*

- Allow users to move seamlessly across the network
- Serve different “user types” in the network
- Allow System determination for network selection
  - Service priority
  - Dual-mode device provisioning
- Tariff determination and Tiered Pricing for data interworking

*Goal of future networks → Maximize revenues with synchronized networks and applications across multiple frequencies and RATs*

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Thanks!

*Talking to the future*