



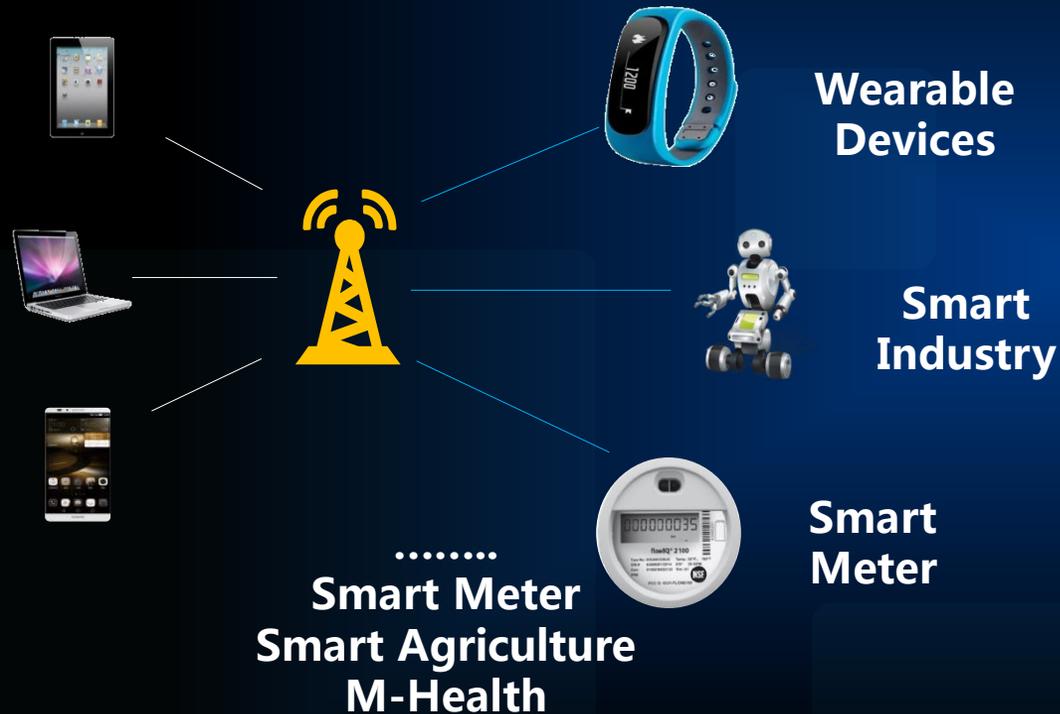
NB CIoT, Ready to Go

Bob Cai , Head of Huawei FDD LTE Product Line

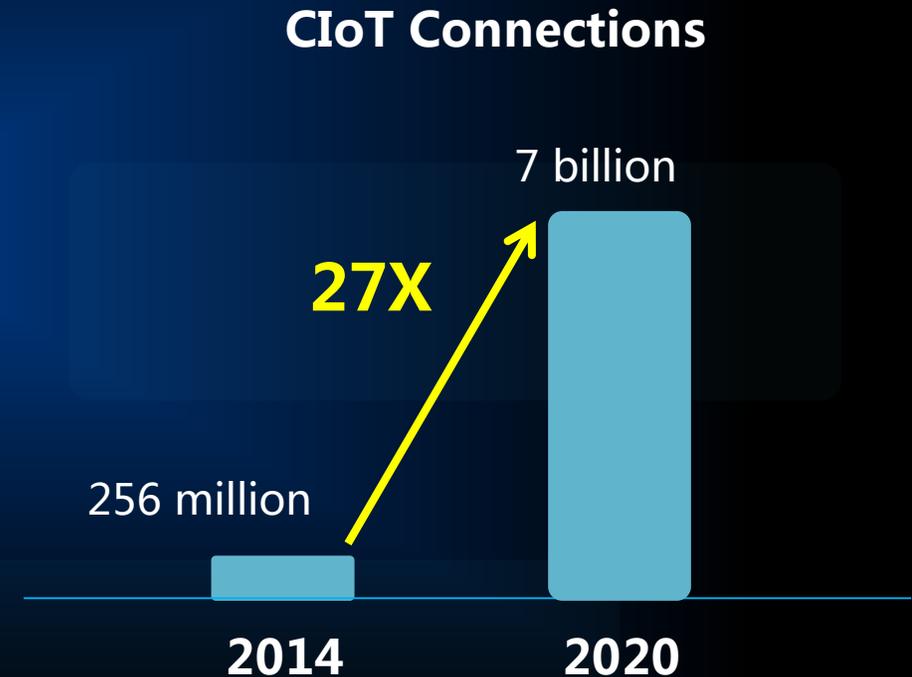


CIoT Opens New Business Market for MNOs

CIoT Expand MNOs Business Space



Big Potential Market



CIoT : Cellular Internet of Things

However, CIoT is Still Facing Challenges



- **Poor Coverage**

e.g: Support Deep in-building

- **Battery Life**

e.g: Smart Meter Demands substantial battery life.

- **Limited Connection**

CIoT Everywhere

- **Low Cost**

Lower Cost, More Opportunity

**NB CIoT can
Meet These
Requirements**

NB CIoT is Our Best Choice

LTE Bandwidth



200kHz

NB CIoT@GSM
NB CIoT@UMTS
NB CIoT@LTE

NB=Narrow Bandwidth



20+dB
Coverage



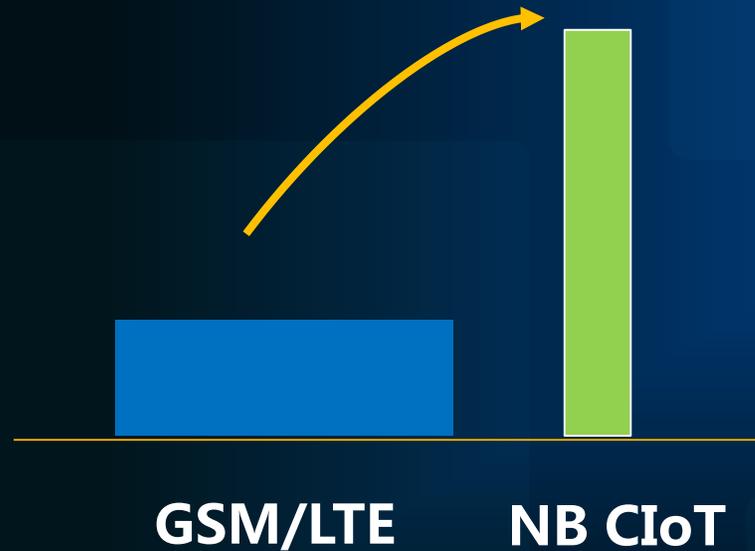
10 year
Battery Life



100K
Connection/Cell

NB CIoT: 20dB+ Deeper Coverage

20dB from PSD Boosting

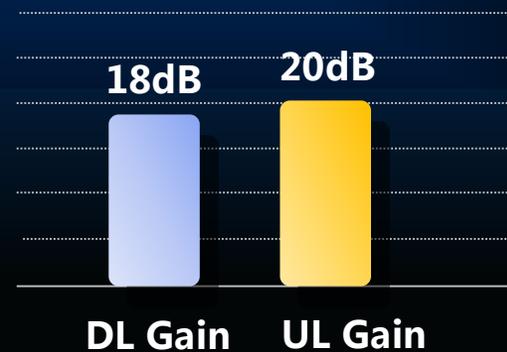


PSD: Power Spectrum Density



- ★ Indoor basement
- ★ Long range indoor (GSM Cell Edge)
- ★ Long range outdoor (Out of GSM cell edge)

Coverage Gain(NB vs GSM)



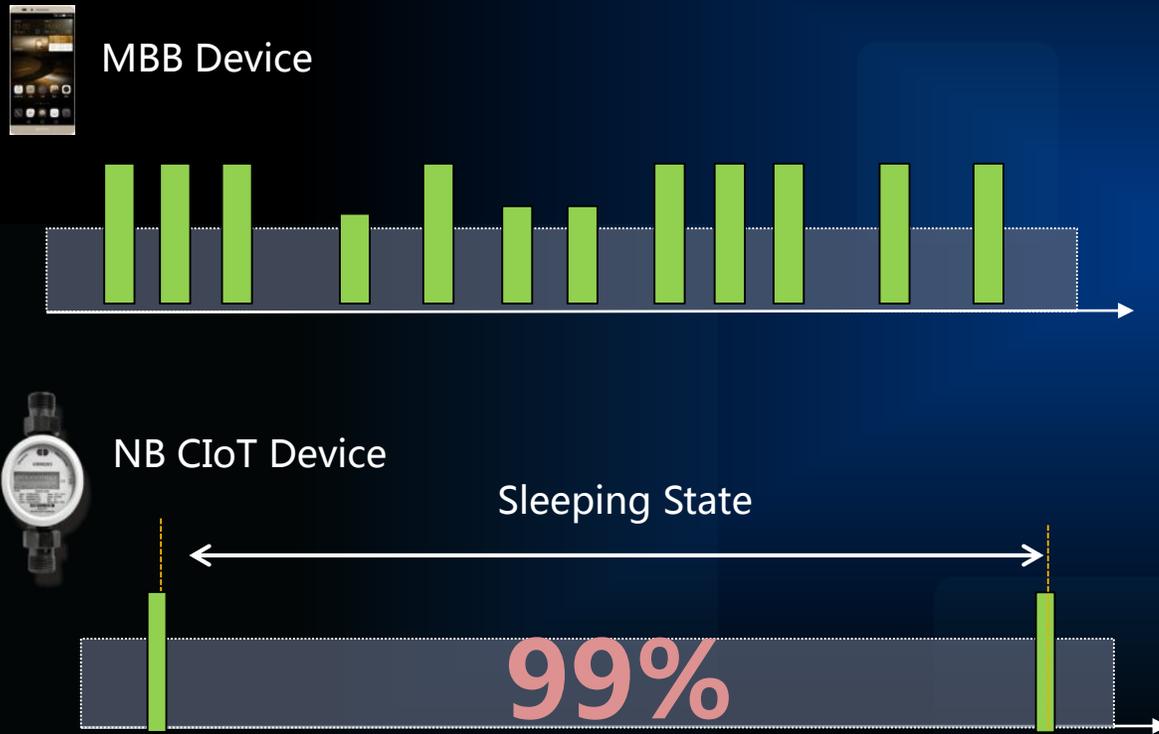
Test In Europe

Feb 26, 2015

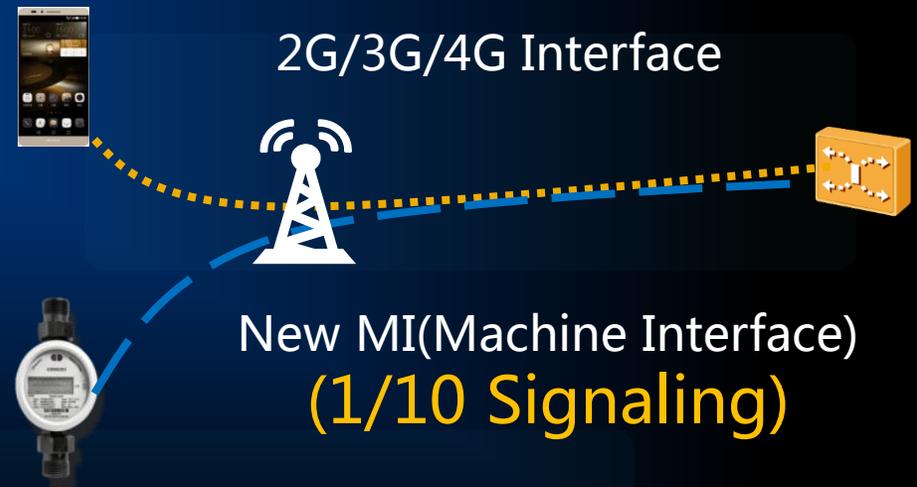


NB CIoT: 10 Years Battery Life

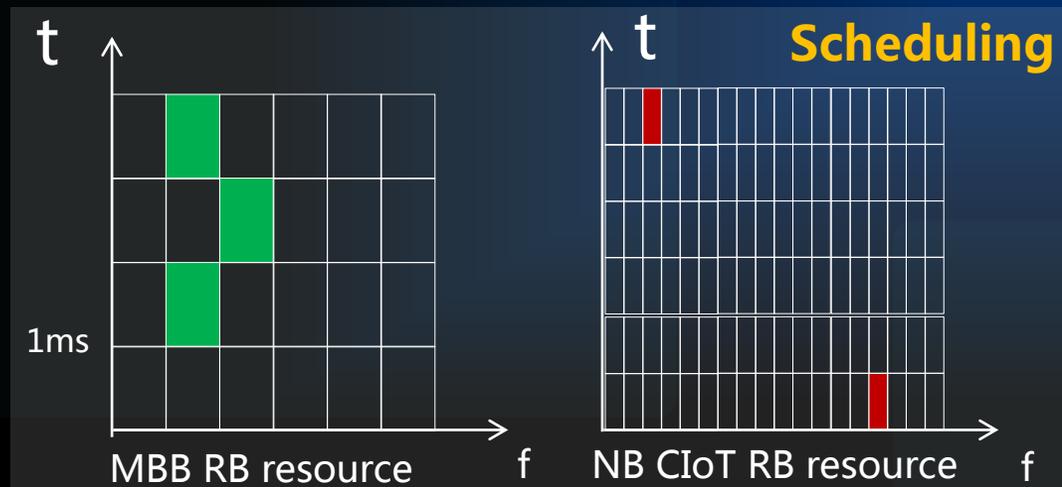
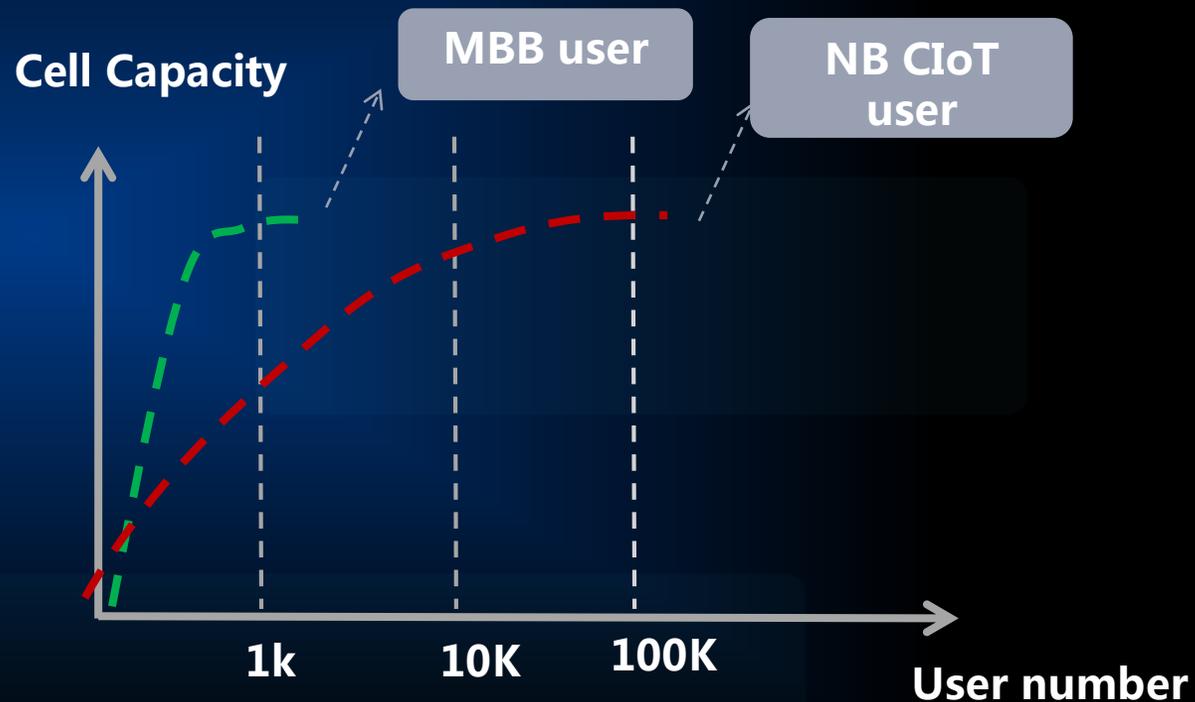
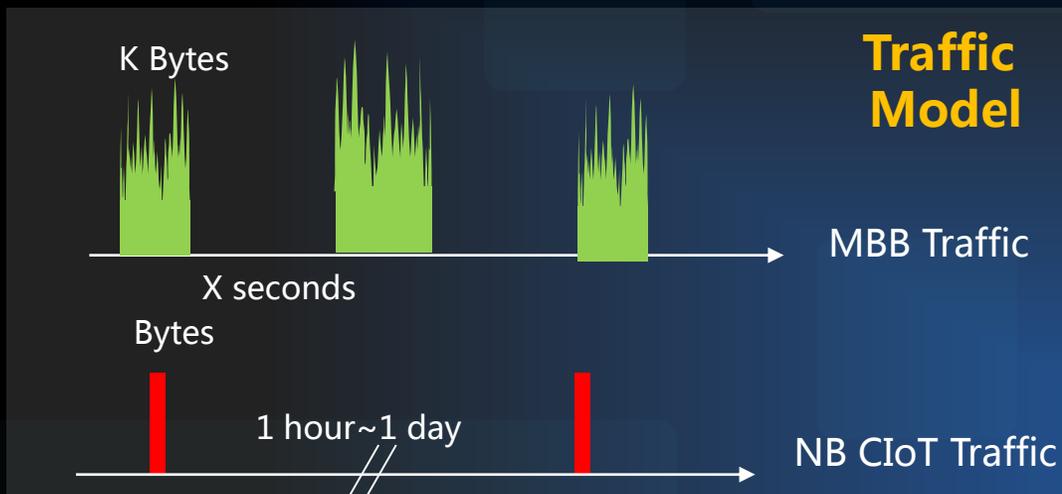
NB CIoT Device is Always in "Sleep State"



Less Signaling, Less Power Consumption



NB CIoT: 100x Connections



Lab Simulation



Cost Effective Deployment for NB CIoT Network

SingleRAN

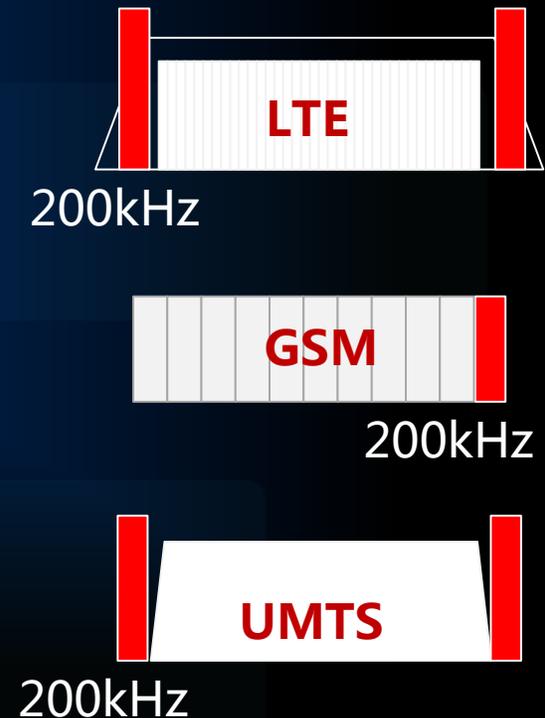


GSM/UMTS/LTE/NB CIoT
(NB CIoT: **No.4 Mode** of SingleRAN)

Low Band



Low Bandwidth



Progress on Standardization and Commercialization



Strongly Supported by MNOs

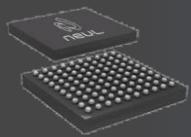


**Common
Understanding**

**NB IoT is Good Enough to Help MNOs
Seize the New Opportunity ASAP**

Eco-System is Taking Off

E2E Solution



Chipset



Module



Terminal



Network



NB CIoT Platform

NB CIoT Demo



Shanghai Unicom & Huawei: NB CIoT Disney Project



NB CIoT Actives Smart Disney

- Smart Parking
- Smart Band
- Pet Tracking
- Asset Tracking (Bicycle.etc)
- Fire Alarm
- ...

NB CIoT Pre-commercial Network



NB CIoT is Really NB

Thank you

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