



Tomorrow never waits

# ZTE view on Way Forward towards Global 5G Vision and Collaboration

Jan Johansson

ZTE R&D Center, Sweden

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# Concluding comments: Overview

- First, we are very glad to see that the development of 5G will be a world wide cooperation



- The world wide cooperation is very important for providing energy efficient (green), high performing and low cost 5G solutions, which is the overall targets.
- All are very positive to global harmonization and cooperation
  - Both for standards and spectrum
- We all need to cooperate in all related areas

# Questions to be considered in near future

1. How to harmonize the early 5G and full 5G features
2. How to harmonize the regional trials
3. How to integrate the verticals requirements and commercialization using 5G standard

# Questions to be considered in near future,

## - Some preliminary answers

### 1. How to harmonize the early 5G and full 5G features

- Early 5G supported with **pre5G**: LTE-A + extended bandwidth
- Full 5G to be supported with **new RAT**, for both IoT and MBB
  - **New channel modeling** for new candidate high frequencies

### 2. How to harmonize the regional trials

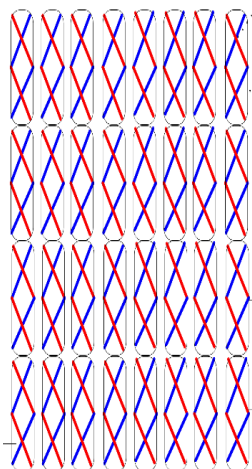
- Now: Operator driven
- Future: To be driven by NGMN and regional/national regulators

### 3. How to integrate the verticals requirements and commercialization using 5G standard

- Now: Telecom lead
- Future: Vertical and Telecom lead

# Pre5G Massive MIMO BTS – ZTE Paper

## Architecture



64 RF Port  
(128 element)

## Outlook - Antenna+RRU+BBU



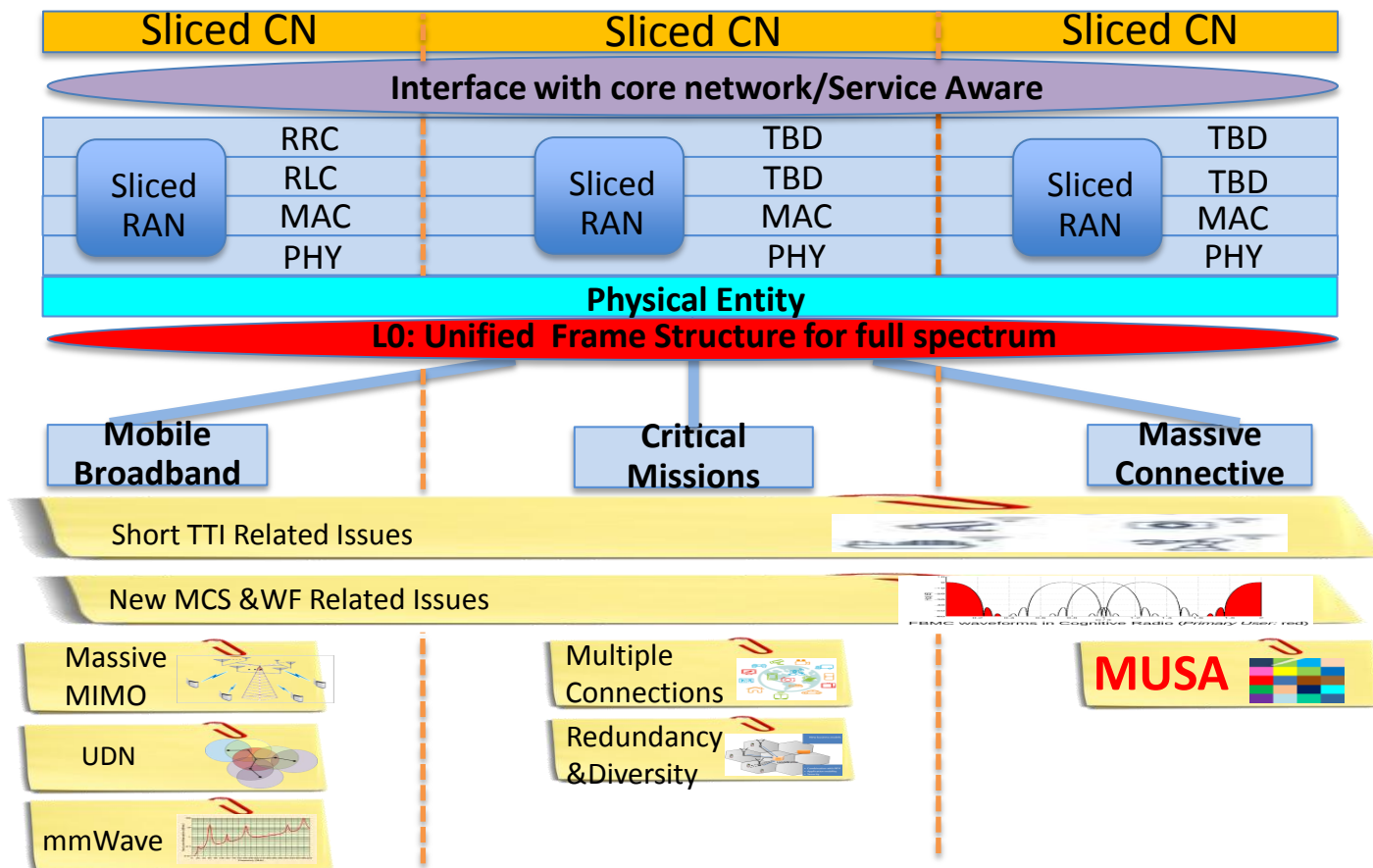
## Index

- Band: 2.6 GHz
- Bandwidth: 20MHz
- TX Power: 40W/Carrier
- Weight: 40Kg
- Size (mm): 900\*500\*120

## 4X-6X Average Capacity Improvement

- Windward Area of Massive MIMO BTS is similar as Legacy TD-LTE Antenna
- In China Mobile Test, Massive MIMO BTS achieves 3X peak data rate and obviously improved high building coverage, as compared with legacy TD-LTE

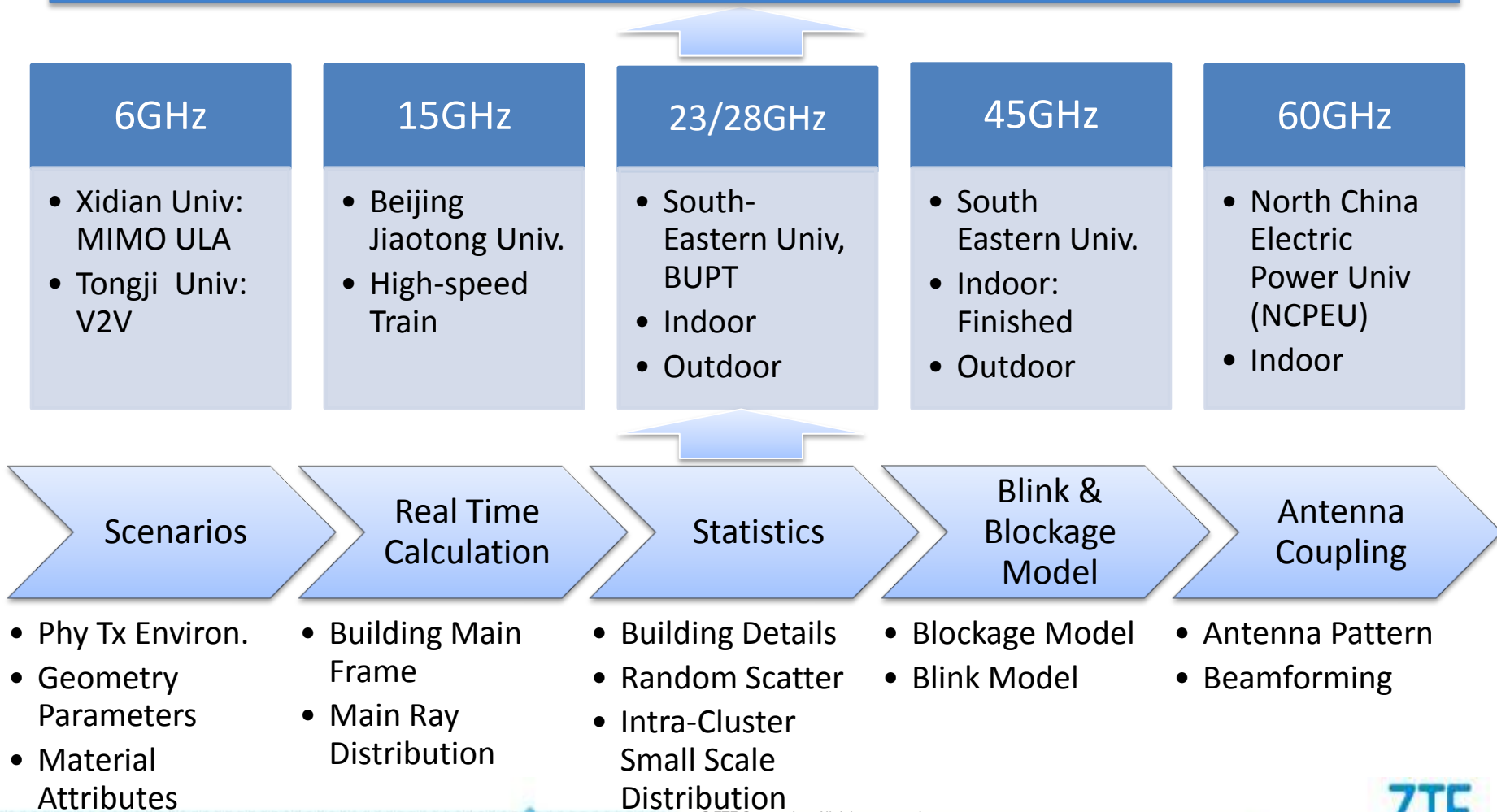
# New 5G RAT with unified Air Interface



# New 5G RAT based on new channel modeling

## - ZTE alliance will contribute with its measurement and analysis results

### ZTE-CMCC Alliance on Higher Frequency Band Channel Measurement/Modeling



# ZTE view on: Way forward towards a global 5G vision and collaboration

- **Harmonization of early 5G and full 5G features**
  - Early 5G supported with pre5G: LTE-A + extended bandwidth
  - Full 5G to be supported with new RAT, for both IoT and MBB
    - New channel modeling for new candidate high frequencies
- **Harmonization of regional trials**
  - Driven by NGMN and regional/national regulators
- **Integration of the verticals requirements and commercialization using 5G standard**
  - Vertical and Telecom lead
- **ZTE is willing to contribute with its global R&D resources for a global harmonization**



# Thanks



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