



FCC Meeting

April 21, 2016

Continued investment in Network and Technology

Continued investment in Network

- 305M American's covered end of 2015, continued investment in network quality and coverage

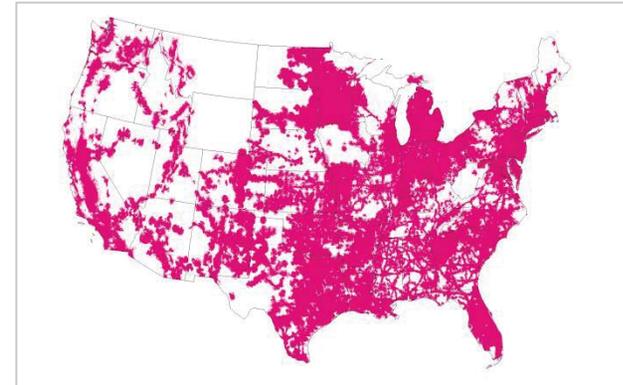
Leadership in Technology

- More than 50% of voice traffic enjoying VoLTE
- New capabilities, such as Enhanced Voice Services (EVS) for improved voice quality, reliability and coverage

Leadership in Service Innovation

- Such as Binge On - stream unlimited video on your favorite services like YouTube, Netflix, HBO NOW, and many more without using a drop of your high-speed data

End of 2015 coverage, 305M POPs

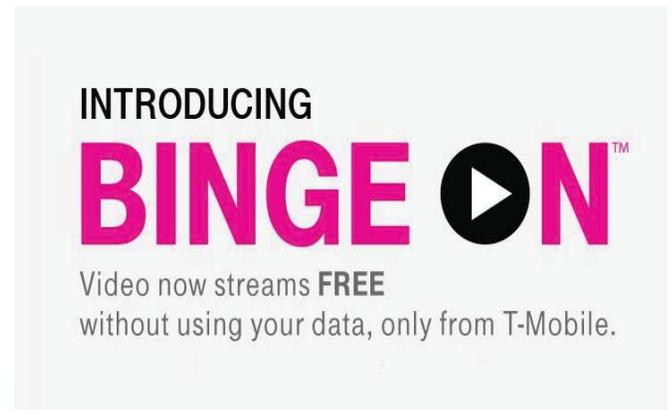


Continued Innovation and investment in Technology



Binge On – Key Statistics

- Binge On includes more than 60 video services representing 70% of all video T-Mobile customers watch on phones and tablets each month
- Since launch five months ago:
 - Customers are watching 2x more minutes per day than before from free streaming services
 - Customers have streamed more than 97 million GB (97 petabytes)
 - One video provider has seen the number of active viewers spike 90% and watch-times nearly triple
- Customers survey results show:
 - 92% of customers said they'll watch more video with Binge On
 - 93% said they like having video optimized so they can watch 3X more
 - 69% of customers said that with their old carriers they'd have expected to pay extra for Binge On



Incentive Auction — Planning for Post-Auction Clearing

39 month clearing is reasonable

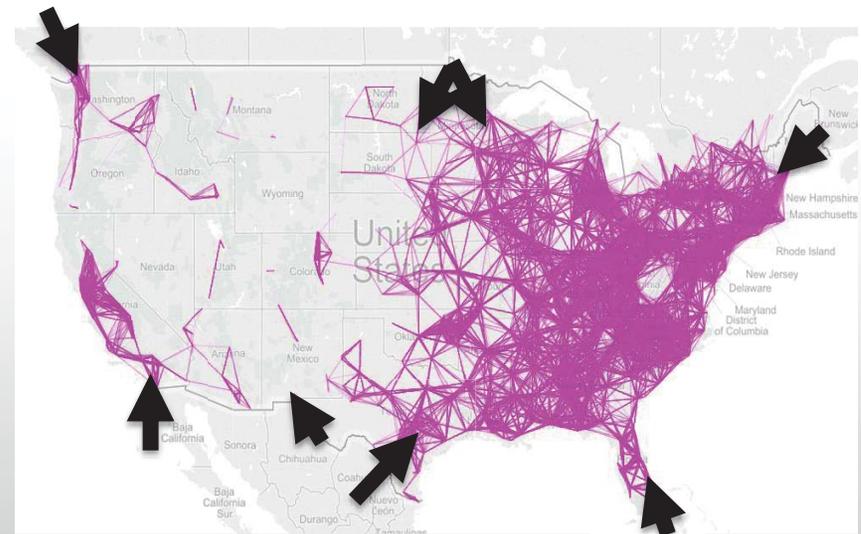
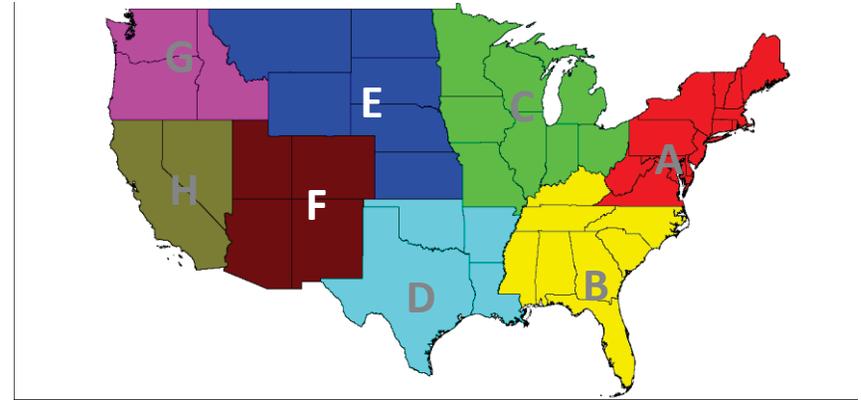
- Record demonstrates that sufficient resources exist

Broadcast Industry is preparing

- New investments in manufacturing production
- Planning and analysis is underway

Efficient plan for repack proposed

- Regional approach
- Balanced between urban and rural
- Logically unravels daisy chains
- Flexibility to shift resources based on circumstances
- Fastest and most efficient approach



LTE-U delays stifle innovation

Co-Existence with Wi-Fi is in the heart of LTE-U development

- Wi-Fi alliance test plan is proceeding, but delaying progress and testing of commercial products

No line of sight to type approval and certification leads to deferral of technology

LTE-U STA

- T-Mobile/Qualcomm STA under review – plan is to begin a series of product testing

LTE-U deployment needed to validate co-existence

- LAA not expected to mature until later on in 2017

LTE-U and LAA timeline



* Estimate based on typical development times

Millimeter-Wave Bands pave the way for 5G

We expect 5G to

- Use high band spectrum assets, at least in the short term
- Evolve over time, and interwork with LTE and its evolution
- Enable new use cases and improve existing use cases

Licensed, large BW spectrum will be critical to the 5G ecosystem

- Refrain from adopting untested use and sharing schemes – such as a Spectrum Access System (“SAS”)

Equitable playing field in mmWaves needed

- To enable healthy and competitive 5G ecosystem in the U.S.

5G Key Themes



New Spectrum



Capacity and Speed



Flexibility and Efficiency



Builds on LTE

5G Spectrum Options

Bands	28GHz	37GHz	39GHz	70GHz
Bandwidth	850MHz	1600MHz	1400MHz	7GHz

T-Mobile submitted an STA to support 5G testing on these bands