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VoLTE Operations Panel



Wireless Phone Telephony - on our way to VoLTE





History



History

Where have we been? (voice)

- Analog
- Digital Wireless (CDMA, GSM)
- Data
- 3G

What changed?....data....lots of it

- CSD (1G/2G)
- 3G (HSPD, EVDO)
- 4G (LTE)



Why do we need to get VoLTE up and running world wide?





What will it take?

Stylize, edit, and animate your media

What will it take?

Doing the same things again

- Basic RF performance – handovers, access attempts
- Network – locating the mobile
- Roaming
- Inter-carrier

Offer the consumer something better

- “HD” voice – only mobile to mobile
- RCS suite of features
- Phones with better battery life

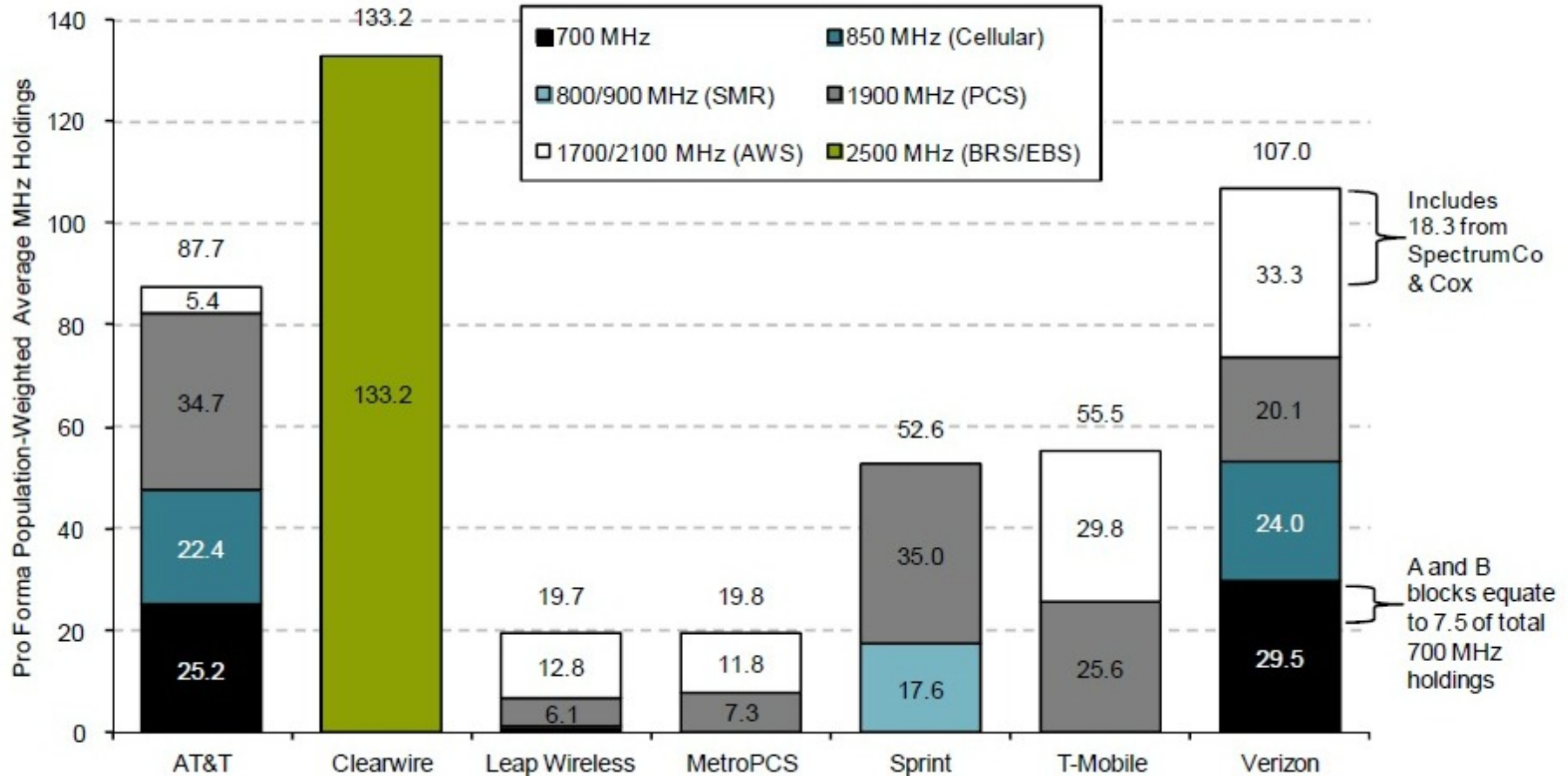
How do we serve the demand of data and voice efficiently?

- Retire 2G/3G technologies – gain access to the spectrum



US Spectrum Allocation - 2012

Population-Weighted Average MHz Holdings of Major Wireless Carriers (Pro Forma for AT&T/T-Mobile Breakup and Verizon's Purchase of AWS Spectrum from SpectrumCo and Cox)



Source: FCC, Deutsche Telekom, Bernstein estimates and analysis



Engineering details of VoLTE – details matter



Engineering VoLTE

- RF Constraints and Solutions
 - Signal Quality
 - Coverage
 - Demands of 'HD' voice – Link Budgets
- Transport needs
- Tools
- The bar been sent high....99.999%...not the social media standard....our industry has a higher standard.





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Jack Fink

@cbs11jack



[#cbs11wx](#) [#dfwwx](#) A cell phone tower hit last night by storm made it difficult for 1st responders to communicate. But now back up [@CBSDFW](#)

11:15 AM · 11 May 15

2 RETWEETS



VoLTE Panel

James Seymour – Cisco – Rosemount, Illinois, USA

- Principal Engineer
- 21 years of industry experience
- BSEE, MSEE, Ph.D., Purdue University, 1989, 1991 & 1994



Kevin Krantz – Ericsson – Plano, Texas, USA

- Manager - Customer Service/Performance
- 33 years of industry experience
- BSAST – Thomas Edison State College



Patrick Casey – Verizon Wireless – Bloomington, Minnesota, USA
(presented by Martin Guldberg)

- Manager – System Performance
- 15 years of industry experience
- BS – Information Technology, University of Phoenix



Thank you!

