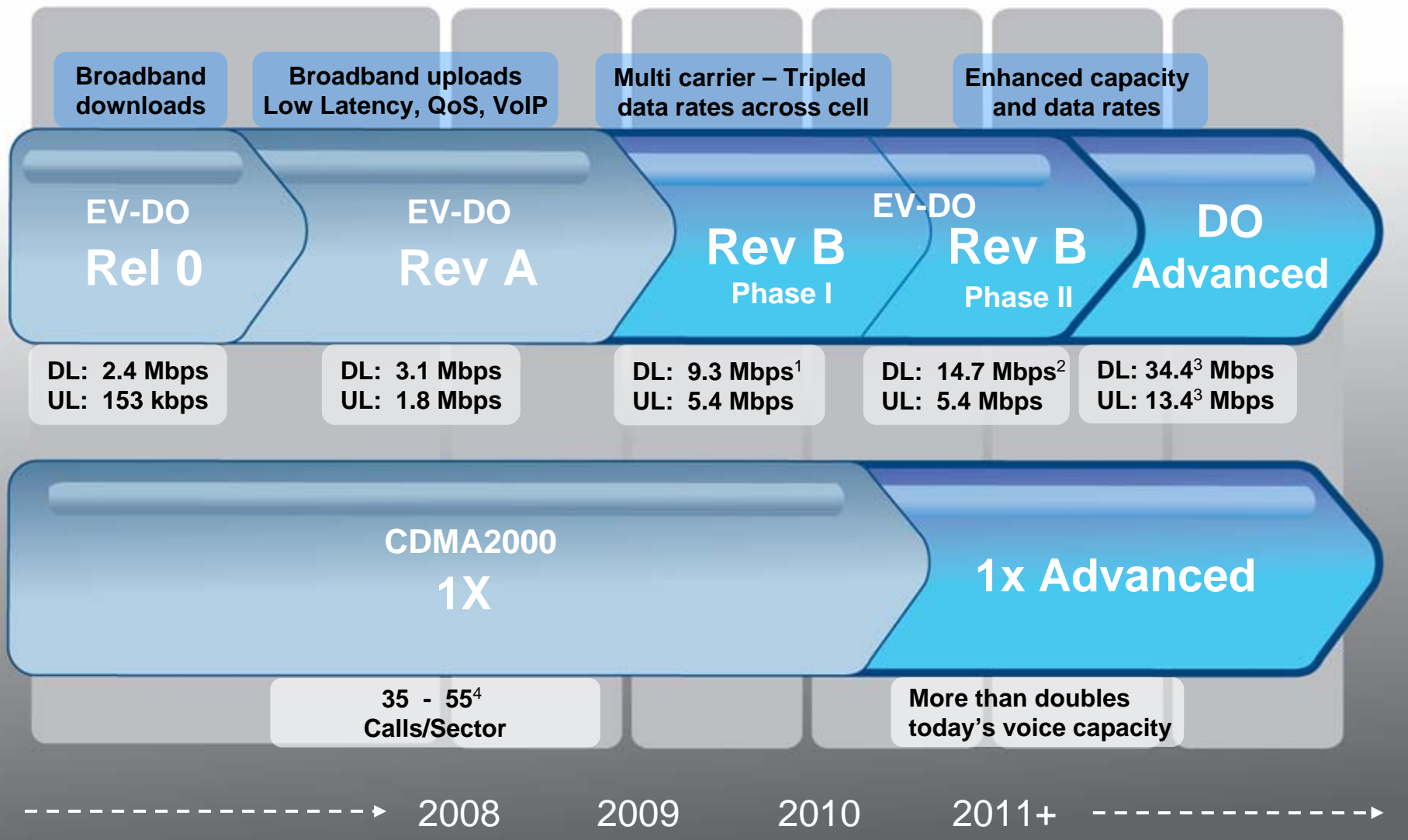




# CDMA2000 roadmap and 1x Advanced

*Cancun May 14 2008*

# CDMA2000: Strong Evolution path



<sup>1</sup>Peak rate for 3 EV-DO carriers supported by initial implementation. Standard supports up to 15 aggregated Rev. A carriers

<sup>2</sup>Peak rate for 3 EV-DO carriers with 64QAM in the DL. Standard supports up to 15 aggregated Rev. A carriers

<sup>3</sup>DO Advanced peak rate for 4 EV-DO carriers as expected for initial implementation, assumes 2x2 MIMO and 64QAM in the DL and 16 QAM in the UL

<sup>4</sup>Capacity increase to 55 calls per 1.25MHz possible with new codec (EVRC-B) and handset interference cancellation (QLIC).

1  
x  
A  
d  
v  
a  
n  
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d

**More than Doubles Voice Capacity**  
Compared to already excellent 1X voice capacity

**Frees up Precious Spectrum Resources**  
Freed up spectrum can be used to augment voice or data capacity

**Leverages Existing Assets and Proven Technology**  
Adding Interference Cancellation and radio enhancements

**Complementary with EV-DO VoIP**  
1x Adv for high capacity voice and EV-DO for integrated VoIP and high-speed data

# 1x Advanced Increases 1X's Excellent Voice Capacity

Voice capacity/sector (1.25 MHz)

1x Advanced

Achievable today



**1X Today**

- EVRC
- Single RX



**EVRC-B**

+ QLIC (device IC)

New handset  
SW Network upgrade

New handset & channel card

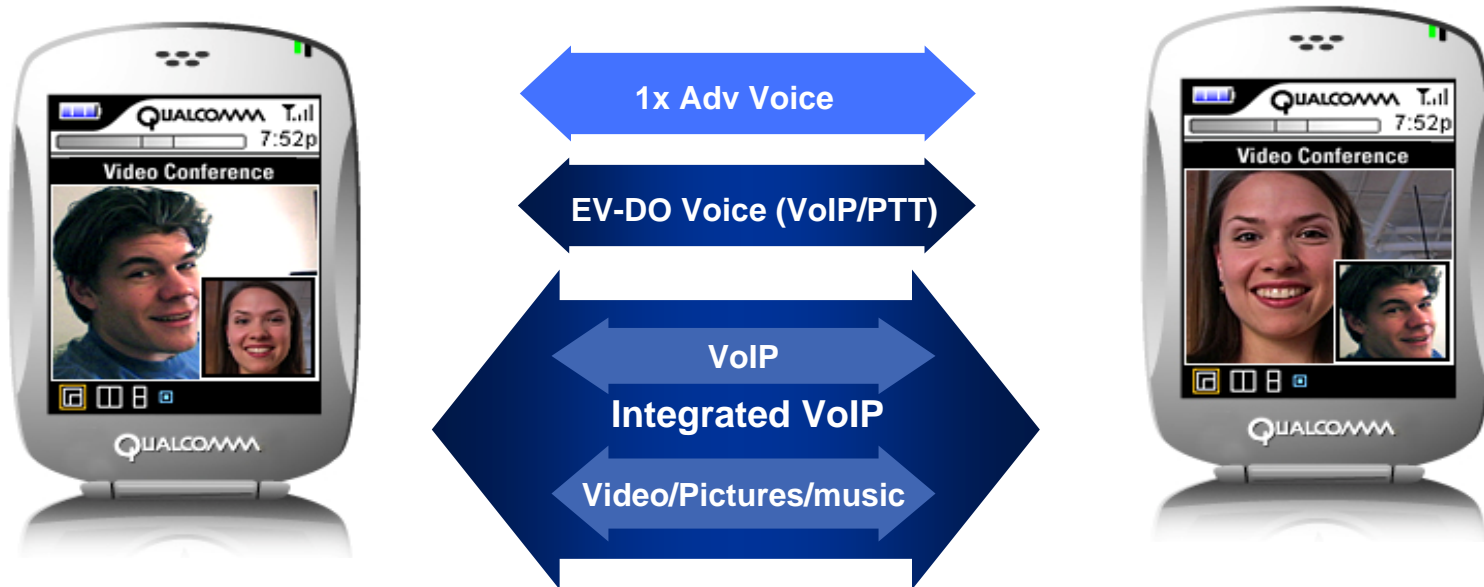
>2X

<p><b>Interference Cancellation</b></p> <ul style="list-style-type: none"><li>• BTS Interference Cancellation</li><li>• Advanced Device IC (QLIC)</li><li>• QOF</li></ul>	<p><b>Radio link Enhancements</b></p> <ul style="list-style-type: none"><li>• Improved power control</li><li>• Early termination</li><li>• Smart blanking</li></ul>
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*1x Advanced more than doubles voice capacity*

# 1x Advanced and EV-DO VoIP are Complementary

- *1x Advanced provides superb capacity for voice*
- *EV-DO VoIP is ideal for IP based Systems and enhanced services*
- *VoIP can be seamlessly integrated with other data services*
  - Flexibility to add/remove other content (Video share, VT, Push-to-X)



***1x Advance for Voice and EV-DO for Data and integrated VoIP***