
# DUPLEX SPACING

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Motorola Mobility Internal

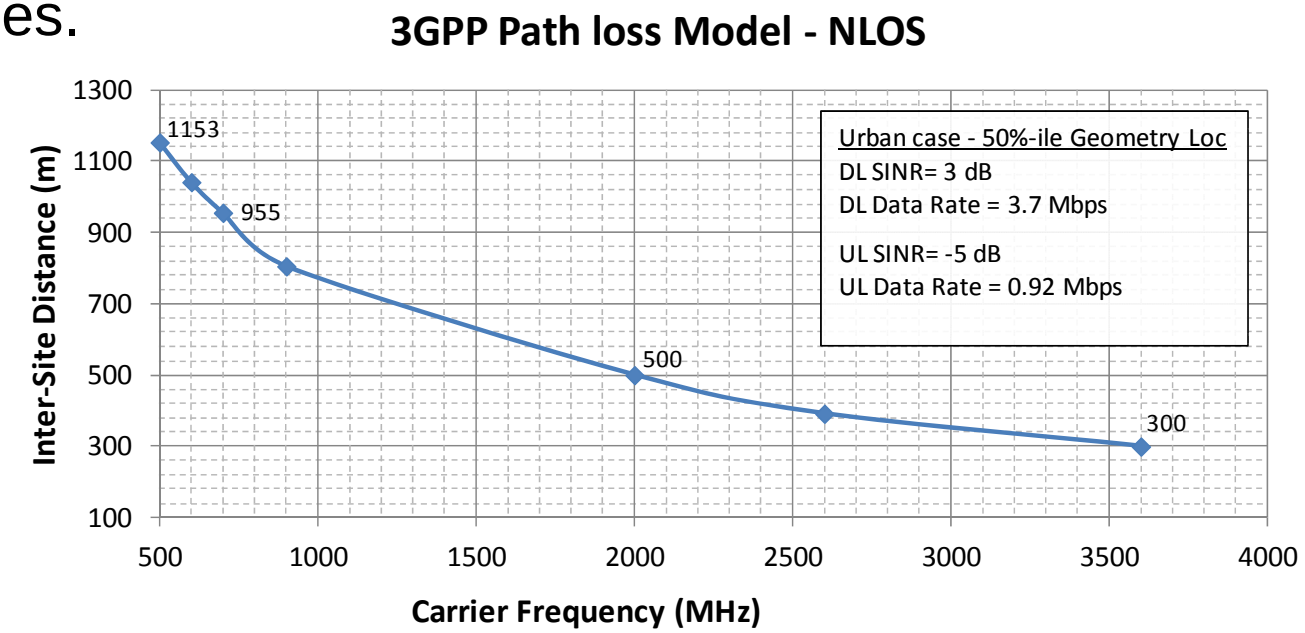
# Rules of Thumb for Duplex Filters

- Avoid Bandwidth > 4% of center frequency
  - At 600MHz, like to keep filter bandwidth <24MHz
- Avoid Duplex gap < 1%
  - 7MHz gap at 700MHz, 26MHz gap at 2.6GHz
- Figure of Merit (bandwidth/duplex gap) < 4
- Distance to nearest interferer
  - We need 6MHz to drop a filter skirt at 700MHz
  - We need 12MHz to drop a filter skirt at 2.6GHz

# AVOID LARGE DUPLEX GAPS

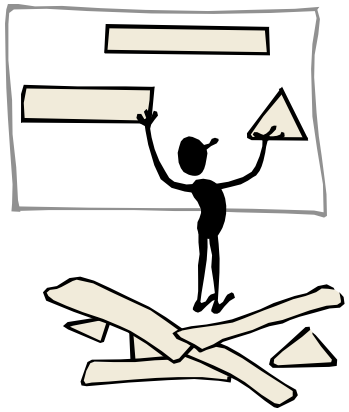
- Large gaps in uplink/downlink frequency result in large differences in uplink/downlink effective cell sizes.

- Consider TDD allocations instead of pairing widely disparate frequencies.



# AVOID VARIABLE DUPLEX GAPS

- We recommend avoiding variable duplex gaps.
- The explosion of bands supported in our products is creating a rapid increase in test time required to validate and certify compliance to existing criteria.
- Variable duplex gaps would force testing at all possible combinations of operation.



# THANK YOU