

FCC's Proposed Lower 700 MHz Interoperability NPRM

March 13, 2012

Vulcan Highlights the Following Points Regarding the NPRM to Unleash the Lower 700 MHz Band:

- **Interoperability is Not About Resolving A Block Deployment Issues.** Potential sources of interference to the A Block do not impact Lower 700 MHz band interoperability and should not be used to also resolve A Block deployment issues or confuse this proceeding.
- **Need for Expeditious Resolution.** The FCC should resolve the NPRM before the end of 2012 in light of looming deadlines and the “spectrum crunch.”
- **Focus on the Lower 700 MHz Band.** The Lower 700 MHz band should be the core focus of the NPRM, and the NPRM should not be delayed by a discussion of Upper 700 MHz interoperability.
- **Technical Support & Analysis.** The FCC should require parties to support their arguments with technical analysis and data.
- **Identify Solutions & Transition.** The FCC should not only examine the engineering and interference arguments regarding interoperability, but also how the marketplace can transition to a single band class.

Interoperability Is Not About Resolving A Block Deployment Issues

- ***Interoperability should not be confused with potential sources of interference to the A Block:***
 - This NPRM should be focused on resolving whether interoperability would cause harmful interference to the Lower B and C Blocks
 - This NPRM should not be focused on interference or deployment issues that only impact A Block
- Device and field testing have been submitted showing that:
 - Lower E Block transmissions do not prevent Lower Band interoperability and will not interfere with Lower A, B and C Block device reception.
 - Channel 51 DTV operations do not pose a threat to B and C Block operations and do not prevent lower band interoperability.

Need for Expeditious Resolution

- *Every day without resolution results in consumer harm, stalled capital, and lost job creation. Specific problems include:*
- Looming Deadlines: A Block licensees need certainty regarding interoperability:
 - To move forward with the FCC’s interim build-out deadline of June 13, 2013.
 - To compete for universal service and other broadband funds intended to spur broadband development in rural America (Sept. 27, 2012 for Phase I of the Mobility Fund, 2013 for Phase II of the Mobility Fund, and must provide service 2-3 years after date authorized to receive support).
- Need for More Mobile Broadband Spectrum and Rural Deployment
 - By mandating interoperability, the FCC can immediately address the “spectrum crunch” and help unleash valuable “orphaned” spectrum that can accommodate new wireless broadband services.
 - Without interoperability, A Block licensees cannot provide competitive service to the increasing number of customers seeking mobile broadband service, including those in rural areas.

Need for Expeditious Resolution (cont'd)

- Entrenchment of Band 17 Devices
 - The FCC's options to craft an interoperability solution will diminish as the subscriber base using Band 17 devices continues to grow.
 - The lack of interoperability may allow new generations of non-interoperable phones to develop, compounding the harm to consumers and A Block providers.
 - Absent interoperability, A Block licensees will be increasingly unable to command the attention of the 3GPP process or the vendor community to meet market demands in a timely and competitive fashion.
- Stranded Investment
 - Interoperability will allow A Block licensees, many of which are small, regional, and greenfield providers—who paid more than \$1 billion in the 2008 auction—to harness value from their investment in the A Block.
- Need for Marketplace Certainty and Robust Competition
 - Interoperability will remove marketplace uncertainty, encourage investment, innovation and job creation in the A Block, preserve the viability of the A Block licensees, and foster competition for wireless service.
 - Development in the A Block will promote innovation and investment in the other adjacent bands.

Need for Expeditious Resolution (cont'd)

- ***A prompt resolution is feasible.***
 - The Commission should ignore third party attempts to make this proceeding unduly complicated.
 - If the Commission issues an order by the end of 2012 mandating interoperability and seeking an implementation timeline:
 - Device design modifications can occur within a few months
 - New device chipsets will not be necessary to support Lower 700 MHz interoperability.
 - Legacy LTE devices and base stations can be upgraded through a software update to support Lower Band harmonization
 - Mandating interoperability will remove a major obstacle to A Block network deployment.
 - A specific deadline will focus all parties to submit the proper evidence for the FCC to make a final decision.

Focus on Lower 700 MHz Band

- In a marketplace clamoring for available spectrum, the A Block represents 12 MHz of prime spectrum that could be immediately deployed in a wide range of markets.
- Achieving interoperability in the Lower 700 MHz band will promote public safety by setting the stage for broader 700 MHz interoperability in the Upper 700 MHz band.
- Interoperability in the Lower 700 MHz band directly impacts consumer welfare and a broad vendor and competitor ecosystem.
- The FCC has established a substantial record focusing on the Lower 700 MHz band, through the AT&T-Qualcomm proceeding and the FCC's interoperability workshop.

Require Technical Support & Analysis

- There are no justifiable policy arguments against interoperability in the Lower 700 MHz band.
- The FCC should not allow engineering conclusions to be made in this NPRM without engineering data.
- Real world interference tests conducted by Vulcan and six other A Block licensees demonstrated no harmful levels of interference that would result from interoperability.
- Unless the FCC takes the lead in requiring a robust and rigorous discussion of interoperability backed by actual engineering analysis, and deadline for resolution, the many benefits of interoperability will be forever delayed by unsubstantiated rhetoric.

Identify Solutions & Transition

- Because of the tremendous costs of delay, the FCC should seek comment on the timing and other issues involved in the transition back to a single band class.
- The technical and engineering arguments around such a transition warrant discussion and development as soon as possible.
- There is no reason to delay a discussion around the needed transition steps.
- Discussions regarding the transition to a single band class will only become more complicated with time, advantaging opponents of interoperability.