

SUMMARY OF THE DOCUMENT  
**U-NII BAND CHANNELIZATION  
AND THE WINFORUM SRDC**

- Prepared for the Joint ETSI/BRAN and IEEE 802.11 Meeting
- September 8-12, 1997

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**PURPOSE OF THE DOCUMENT**

- Summarize the Objectives and Scope of the WINForum Sharing Rules Development Committee (SRDC)
- Present the SRDC Fixed Channelization Proposal for the U-NII Band
- Review the Part 15 Restricted Band Rules Effect on Out-of-Band Emissions
- Preliminary Guard Band Calculations
- Summary of the WINForum U-NII reconsideration petition

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## Objectives and Scope of the SRDC

- Obtain U-NII Spectrum
- Interact with Regulatory Bodies to Set Rules for Use of the Band
- Develop Spectrum Sharing Rules for the Industry

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## Fixed Channelization Proposal

- The U-NII Band Should Support Signaling Rates of 20 to 25 Mb/s
- Mixed Bandwidth Potential Problem
  - Wide Range of Potential Application Signaling Rates Needed
  - Minimum Channel Spacing Required Because of Wide Signaling Rate Range and Mixed Bandwidth Incompatibility
  - Detailed Technical Discussion of Mixed Bandwidth Problem in Appendix A
- SRDC Recommends Fixed Frequency Assignment

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## Part 15 Restricted Band Rules

- Average and Peak EIRP Specified by the Part 15 Rules
- The Power Spectral Density is Derived From This
  - Based on some current interpretations which are still being investigated
- Band Edge PSD 15-16 dB More Severe Than HIPERLAN Requirements for the U-NII Middle Band
- Significant Guard Bands Needed

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## Preliminary Guard Band Calculations

- Characteristics of Intermodulation Distortion on Widening Transmitted Spectrum
- Measurements Given in Appendix B of the Paper
- Preliminary Estimate
  - Example Intraband Channel Isolation Specs (30 dB PSD Adjacent Channel)
  - 1 to 1.3 Channels Widths of Guard Band Needed to Satisfy Restricted band Rules
  - Further Study Needed

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## U-NII Reconsideration Petition

- Rulemaking not finalized
- SRDC working closely with NTIA to resolve issues
- 9 issues addressed in reconsideration petition
- Most important issues:
  - total power output
  - definition of measurement of power spectral density
    - If denied: total power permitted 6-10 dB lower than limits specify

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