

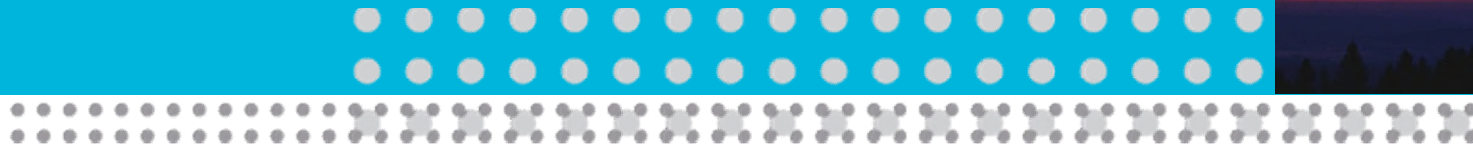
NSMA Annual Conference

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Holiday Inn Rosslyn at Key Bridge
Arlington, Virginia

Bulletin 10 Update Status

George Kizer , Nokia



So what is Bulletin 10F becoming?

TIA Bulletin 10F was published in 1994.

It's introduction coincided with the introduction of Part 101.

It introduced the concepts of T/I, ATPC and PCN.

The new version will be an TIA/ANSI standard.

It will provide needed updates and clarifications.

It is intended to define state of the art North American fixed point-to-point microwave path design.

What will the new standard be?

- Section 1 - Introduction (previously Section 1) (Tasks C, F and J)**
- Section 2 - Interference Estimation (previously Section 3) (Task D and H)**
- Section 3 - Analog FM-FDM Receiver Interference (previously Annex A) (Task B)**
- Section 4 - Analog FM Video Receiver Interference (previously Annex C)**
- Section 5 - Analog AM-VSB Video Receiver Interference (previously Annex D)**
- Section 6 - Aural BAS Receiver Interference (Task P)**
- Section 7 - Radar Interference Mitigation (unpublished 10G draft)**
- Section 8 - Digital Receiver Interference & T/I (previously Annex B) (Task I)**
- Section 9 - Coordination with Satellite Earth Stations (Task L)**
- Section 10 - Multipath Fading Path Design (previously Section 4) (Task C)**
- Section 11 - Rain Fading Path Design (previously Section 4.4.2/3) (Task K)**
- Section 12 - Automatic Transmit Power Control (previously p/o Section 4) (Task A)**

Section 1 - Introduction

Totally New Text

Primary Coverage:

Microwave System Design Objectives

Concepts of Quality and Availability

Accuracy expectations

Status: Final Draft

Section 2 - Interference Estimation

Legacy Text (with one addition*)

Primary Coverage:

C/I and T/I

Calculation of Interference Power

***Adds antenna discrimination for short paths**

Status: Final Draft

Section 3 - Analog FM-FDM Receiver Interference

Modified Legacy Text

Primary Coverage:

Sideband interference now uses ITU-R SF.766

North American specific loading and legacy inter-carrier beat and threshold calculations have been retained

Status: Final Draft

Section 4 - Analog FM Video Receiver Interference

Legacy Text

Primary Coverage:

Analog FM Video Interference Estimation

No changes from Bulletin 10F

Status: Final Draft

Section 5 - Analog AM-VSB Video Receiver Interference

Legacy Text

Primary Coverage:

Analog AM-VSB Video Interference Estimation

No changes from Bulletin 10F

Status: Final Draft

Section 6 - Aural BAS Receiver Interference

New Text

**Primary Coverage:
Aural Broadcast Auxiliary Systems (BAS)
systems in the 944-952 MHz band**

Status: Final Draft

Section 7 - Radar Interference Mitigation

New Text (from legacy Bulletin 10F updates)

Primary Coverage:

Radar interference in the lower 6 GHz band

Status: Final Draft

Section 8 - Digital Receiver Interference & T/I

New Text

Primary Coverage:

Digital receiver interference and T/I considerations

Status: Active Updating

Section 9 - Coordination with Satellite Earth Stations

New Text

Primary Coverage:

Satellite Earth Station coordination parameters

Supports the use of ITU-R SF.1006 and SM.1448

Status: Final Draft

Section 10 - Multipath Fading Path Design

New Text

Primary Coverage:

Path availability calculations are Vigants-Barnett

Path clearance criteria are North American

Dispersive fading is estimated using Tom's equations

Status: Final Draft

Section 11 - Rain Fading Path Design

New Text

Primary Coverage:

Fading estimation uses Crane method with site specific rain parameters

K and α use latest ITU-R methods (ITU-R P.838-3)

Status: Final Draft

Section 12 - Automatic Transmit Power Control (ATPC)

New Text

Primary Coverage:

Changes necessary for Adaptive Coding Modulation (ACM)

Coverage of rain dominated high frequency bands

Status: Active Updating

Are we done yet?



“Only” Sections 8 (T/I) and Section 12 (ATPC) unfinished.

Final audit needed.

Completion late summer possible.

A scenic view of a city, likely Cambridge, Massachusetts, featuring a large stone bridge over a river. The bridge has multiple arches and a walkway on top. In the background, a prominent Gothic-style building with a tall spire is visible, surrounded by other buildings and trees. The word "Questions?" is overlaid in large red text in the center of the image.

Questions?