



Presentation on Draft Frequency Migration Regulation and Plan

6 November 2012



- Introduction
- Overview
- Commercial impact
- Technical impact
- Recommendation

Agenda

Dishwasher



Introduction

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Overview

- Migration must emphasize introduction of competition to the sector
- Outcome of this process must provide for efficient and optimum use of spectrum
- Regulatory cost impact assessment must underpin this process
- Migration of C-Band to Ku-Band must be informed by Africa based solutions



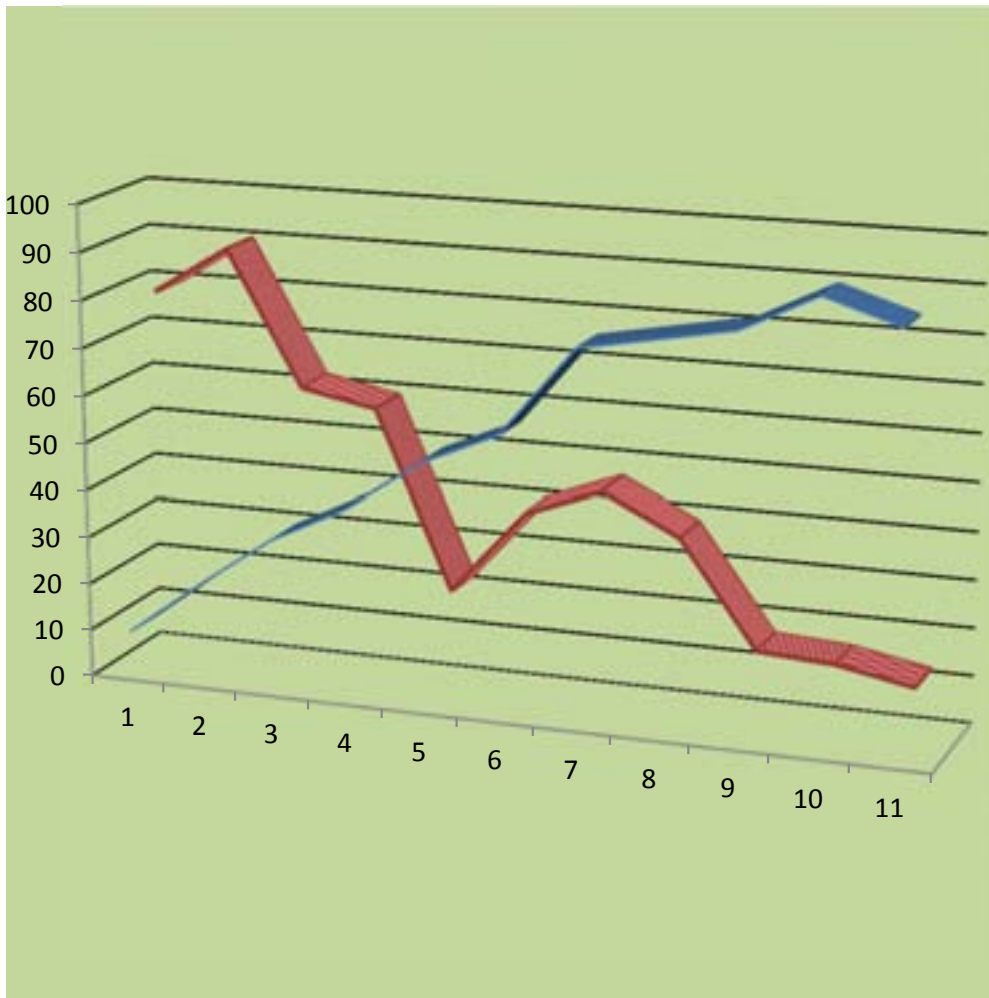
Services landing in SA

- C-Band & Ku-Band
- Hub services (PtMP)
- SCPC services (PtP)

Customer base

- Mining
- M2M / Facilities
- Maritime
- Banking & Financial
- Retail
- Government (DIRCO)
- PoP backhaul / backup

Internet Solutions as a VSAT
provider across Africa and MEA



- **Commercial Impact**

- › **Investment Loss**

- Service Provider
- End User

- › **Operational Cost**

- Cost of Change

- › **Reduction in C Band Capacity**

- 33% Loss
- Increase in cost estimated at 15%

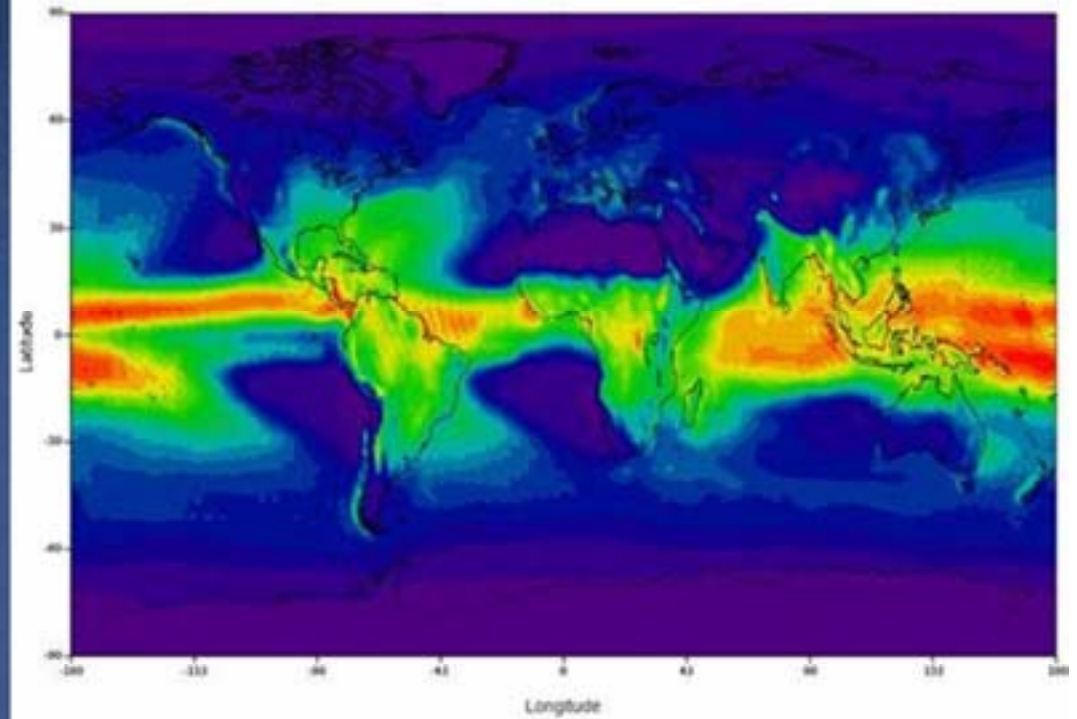
- › **Impact**

- Estimated combined cost – Conservative R100 Million
- Long term recovery period
- Increased Costs

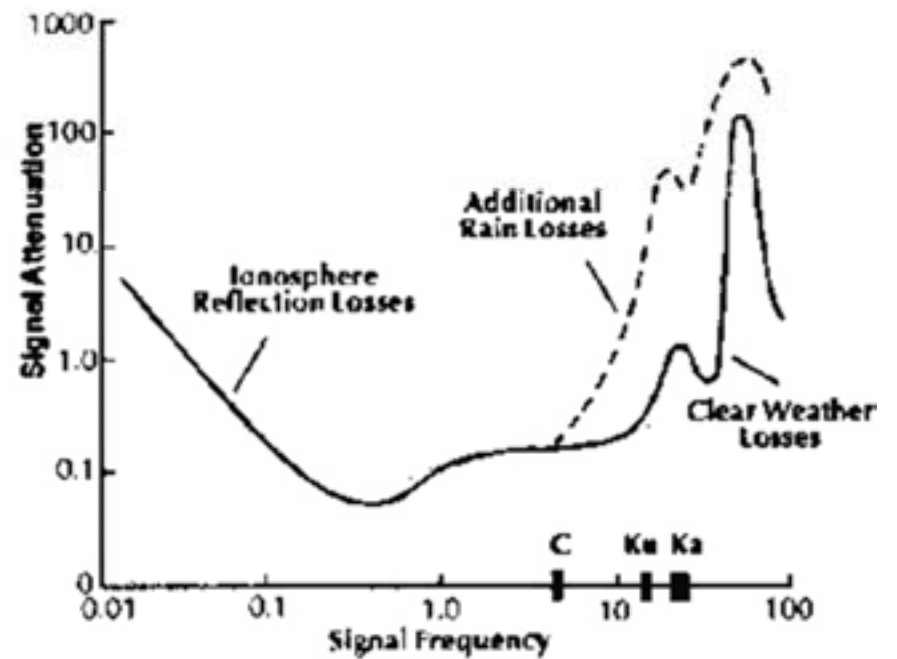
Commercial Impact



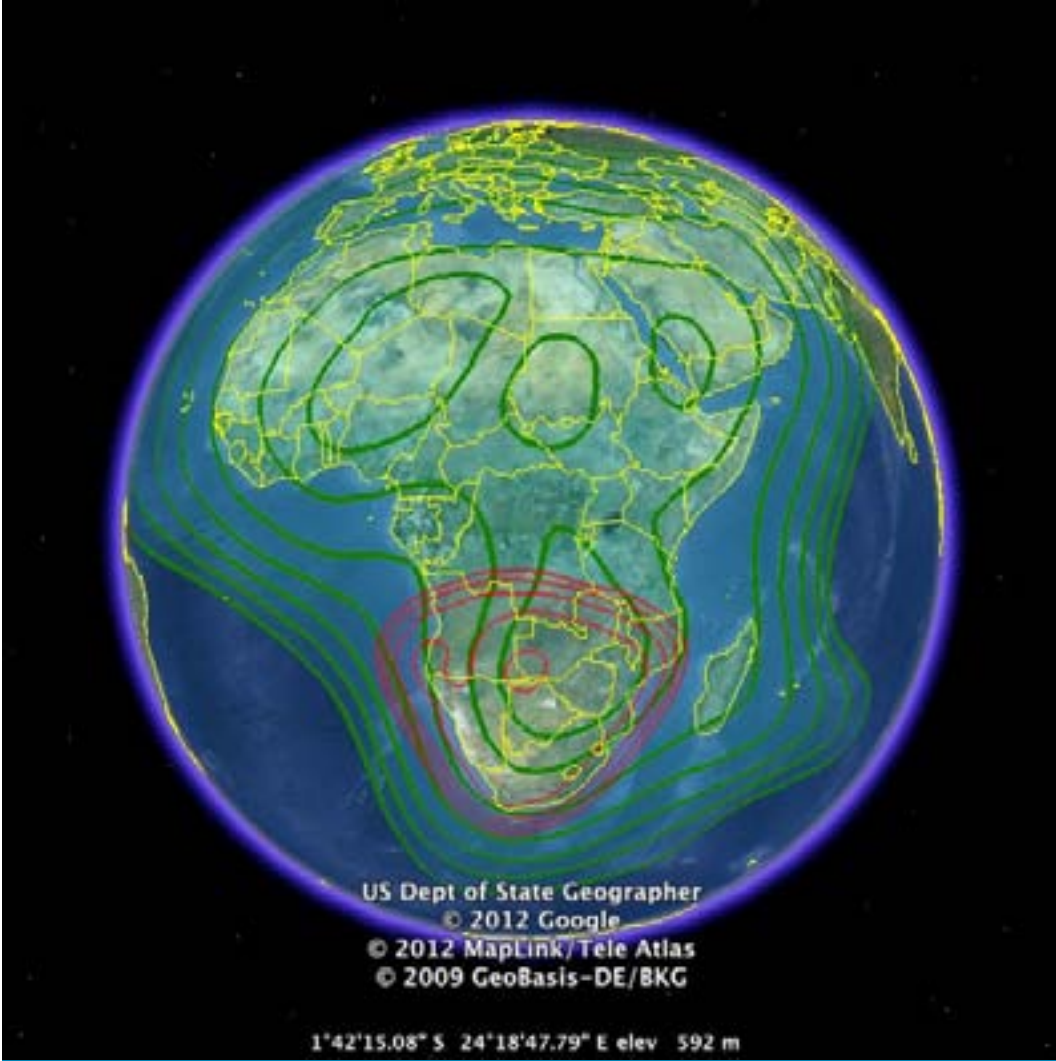
Rain attenuates Ku-Band significantly more



0.01% annual rainfall exceedance rate (Source ITU-R)
Source <http://www.mike-willis.com>

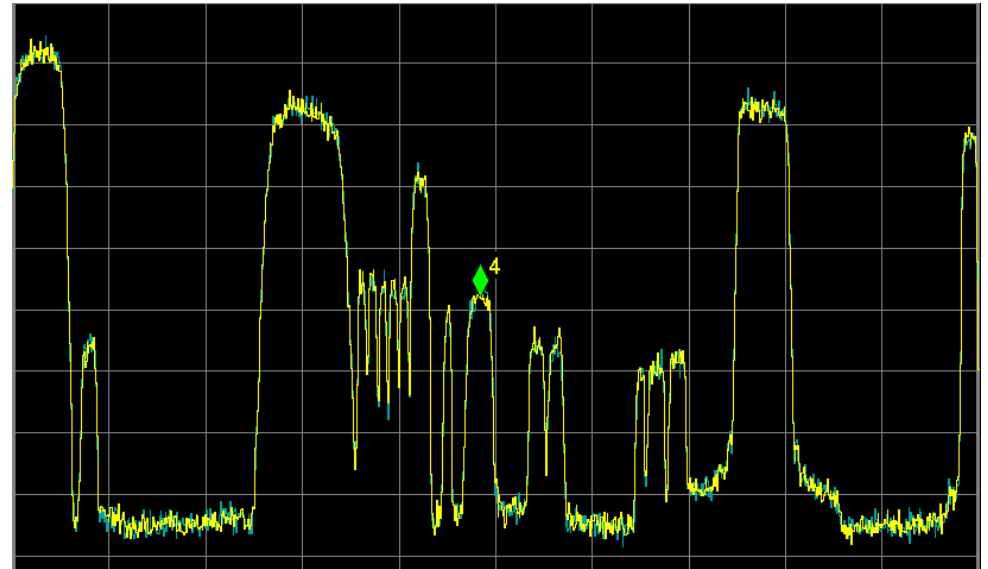


Source <http://www.geo-orbit.org>



C-Band (green) footprint
vs.
Ku-Band (red) footprint

C-Band Africa Beam

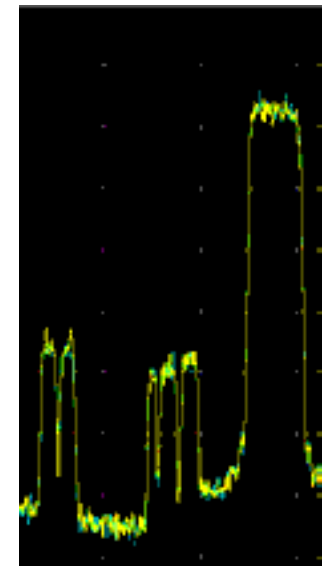
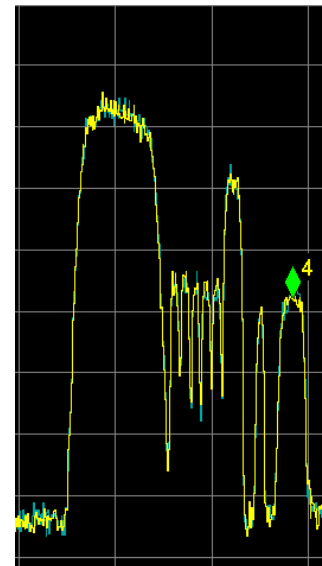


North Hemi



Ku-Band
2x Beams

South Hemi



Tests Results Show Overdrive of LNB

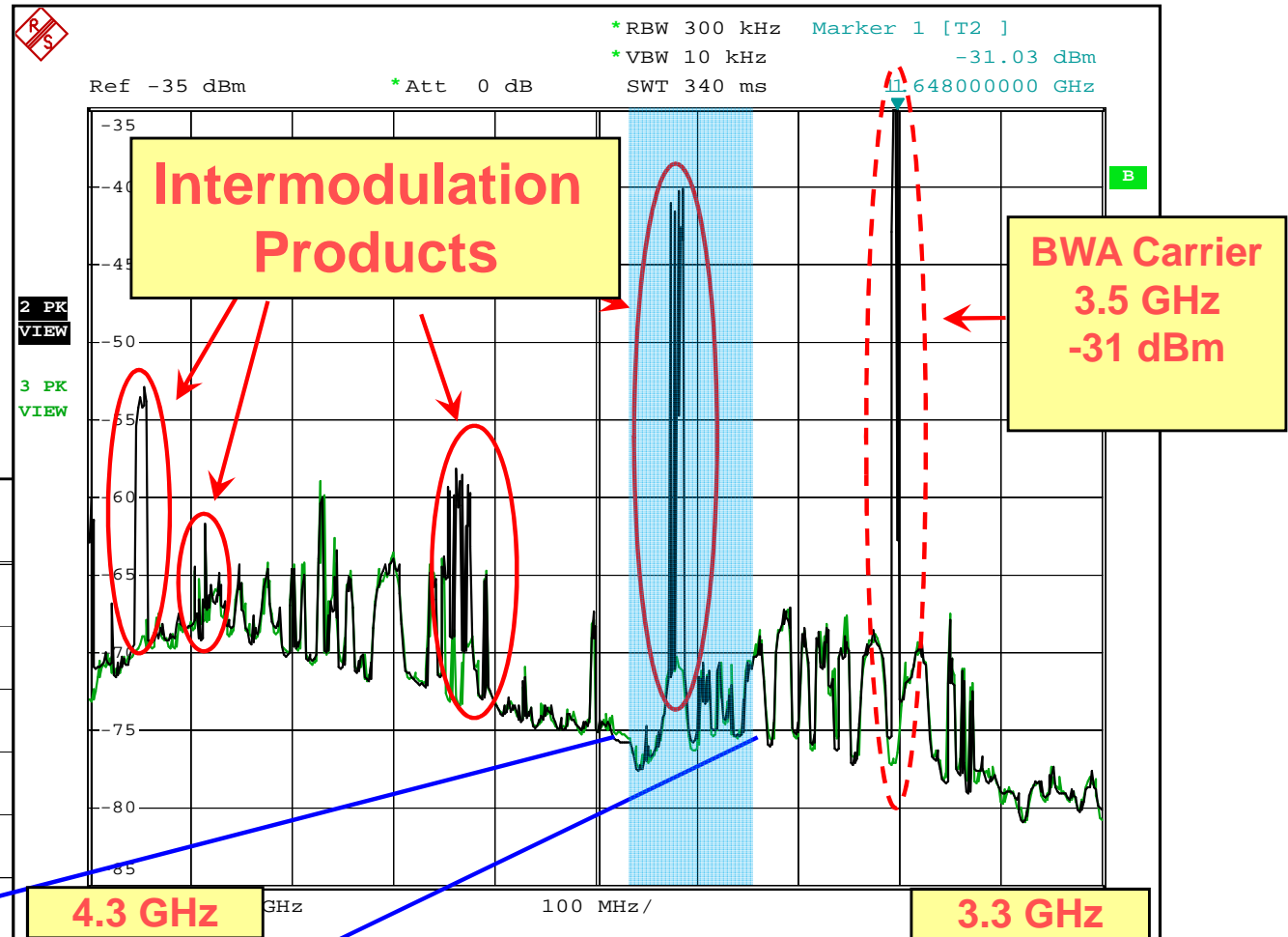
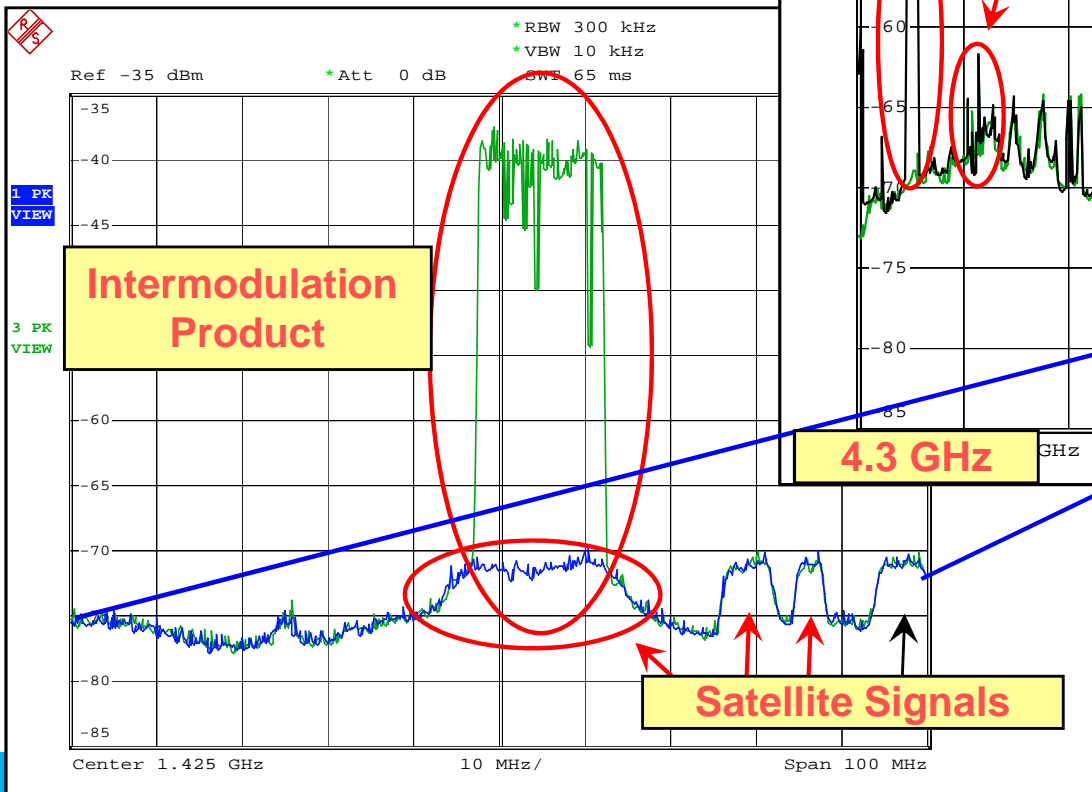


Satellite Users Interference Reduction Group

SUIRG WiMax Test Results

NSMA Meeting
Washington, D.C.
20, 21 May 2008

Stopping Interference Before It Starts



Source <http://www.nsma.org/>



Recommendations

Allocating 3600-3800 MHz to BFWA has significant negative impact on VSAT operations, both commercially and technically.

Migrating C-Band to Ku-Band is not feasible for all services. The Geography does not warrant following Europe or USA in this spectrum migration.

IS requests 3600 to 4200 MHz remains dedicated to FSS, as per current allocations.

**THANK
YOU.**



internet solutions

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