



**Public hearings:
Draft Regulations on the Digital
Terrestrial Television Regulations**

23 August 2012

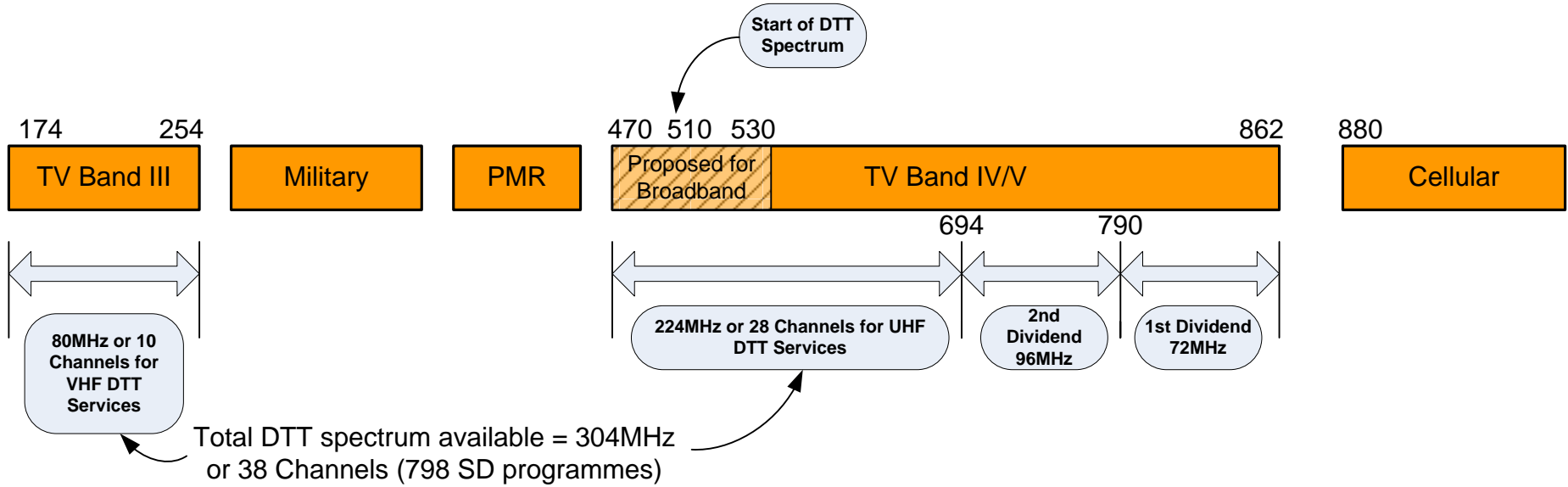
Introduction

- BanziNET wishes to thank ICASA for the invitation to present our views concerning the proposed DTT regulations
- Our views are expressed from the perspective of providing rural broadband services using radio technology
- Appropriate frequencies for rural broadband are of paramount importance

DTT International Spectrum Trends

- Broadband and TV services have equal importance in society (presentation by BBC's David Hemingway - available on ICASA's web site)
- All governments expect a significant Digital Dividend (ITU GE06 Agreement for Digital Broadcasting)
 - UK 112MHz Band V
 - USA 105MHz in Band V
 - Japan 130MHz in Band II, III, and V
- Many countries start their DTT channels at 510MHz
- UK did not use any spectrum in Band III for DTT

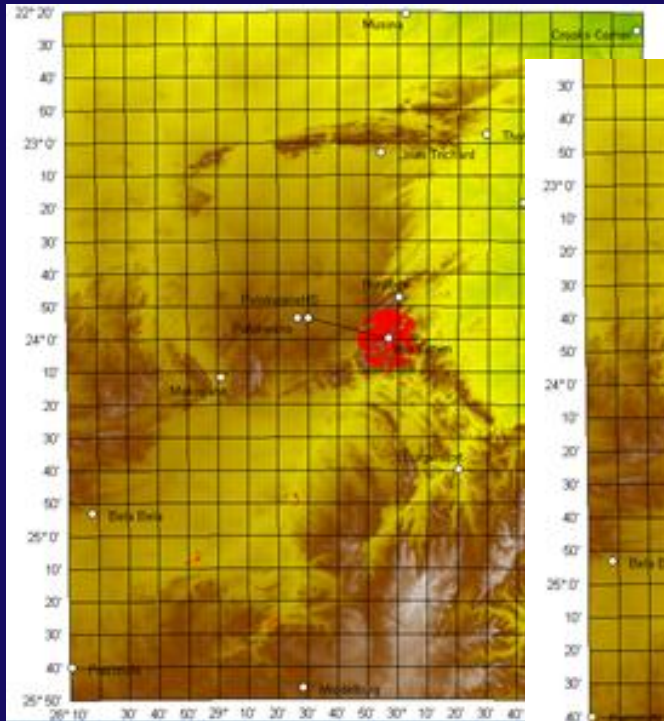
Spectrum Allocation



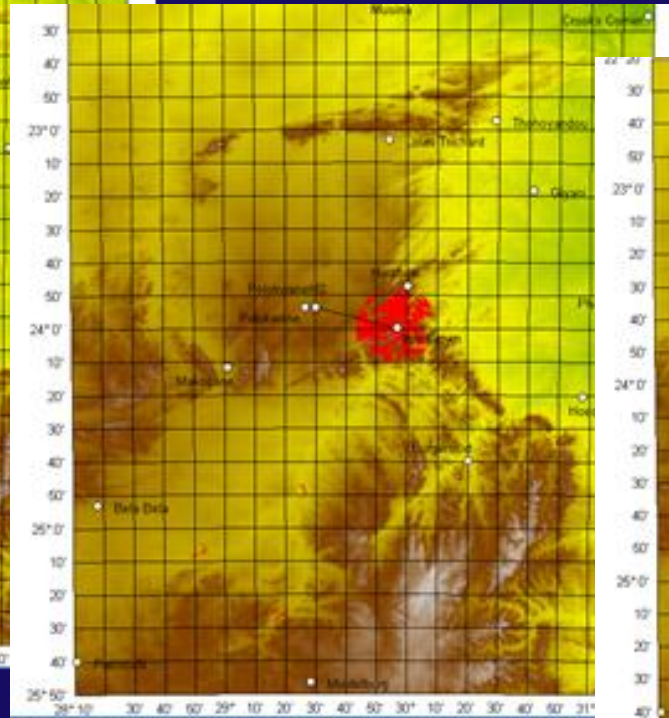
How many RF channels are Required?

- Our proposal below is for the frequency plan after analogue switch-off
 - Two National Single Frequency Multiplexes - needing only 2 x RF channels.
 - 9 provinces, each with it's own Single Frequency Network – needing 4 x RF channels. (Swaziland and Lesotho could be included in the same plan)
 - Our neighbouring countries would each require 2 x RF Channels (8 in total).
- The region thus only requires 14 of the 38 RF channels available

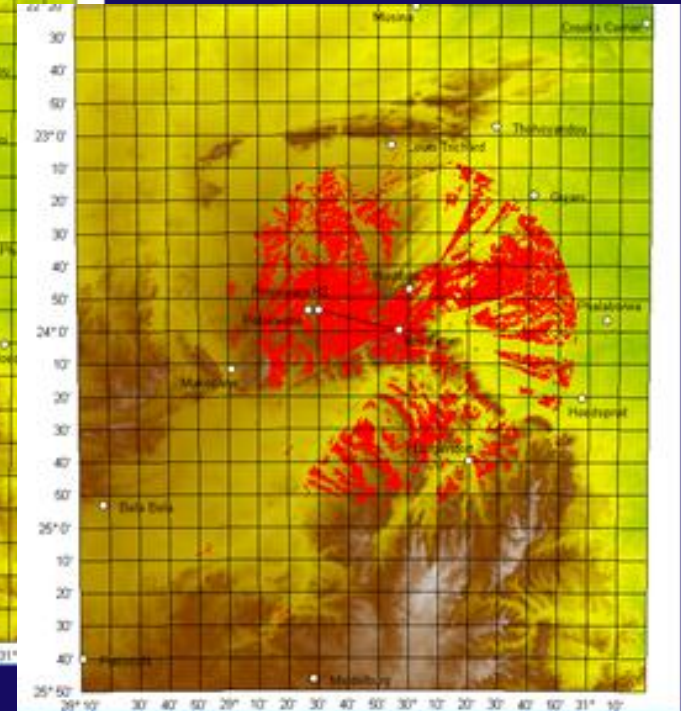
Lower Frequencies for Rural Broadband



3,500MHz



2,600MHz



500MHz

Broadband would require 60MHz between 470MHz and 530MHz – 2 x 30MHz per operator

Spectrum Allocation Proposal

- DTT Band III 174MHz – 238MHz (8 x 8MHz channels)
- DTT Band IV/V 534MHz – 694MHz (20 x 8MHz channels)
- Rural Broadband 470MHz – 530MHz (2 x 30MHz and 4MHz Guard Band)
- DAB Band III 238MHz – 246MHz (1 x 8MHz channel) for DAB using SFN

Conclusion

- BanziNET believes sufficient spectrum is available as part of the digital dividend to accommodate significant spectrum for rural broadband on the bottom of UHF Band IV/V
- It would be appreciated if BanziNET could be included in the Joint Spectrum Advisory Group of ICASA

Questions?