

PACIFIC MEDIA PARTNERSHIP CONFERENCE - 2015

DIGITAL TERRESTRIAL TELEVISION FREQUENCY PLANNING

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OUTLINE

- NZ's Digital TV Frequency Plan and Released Spectrum
- Europe and US differences
- Key Learning Relevant to the Pacific



SPECTRUM RELEASED

Bands	Band I	Band III		UHF (Band IV & V)				
Before	44-68	174	230	510				806
After	44-68	174	230	510		694	702	806
Actual	44-68	174	230	510	622	694	702	806

- Analogue and Digital Assigned:
 - VHF Band I 44 – 68 MHz
 - VHF Band III 174 – 230 MHz
 - UHF Band IV & V 510 – 806 MHz

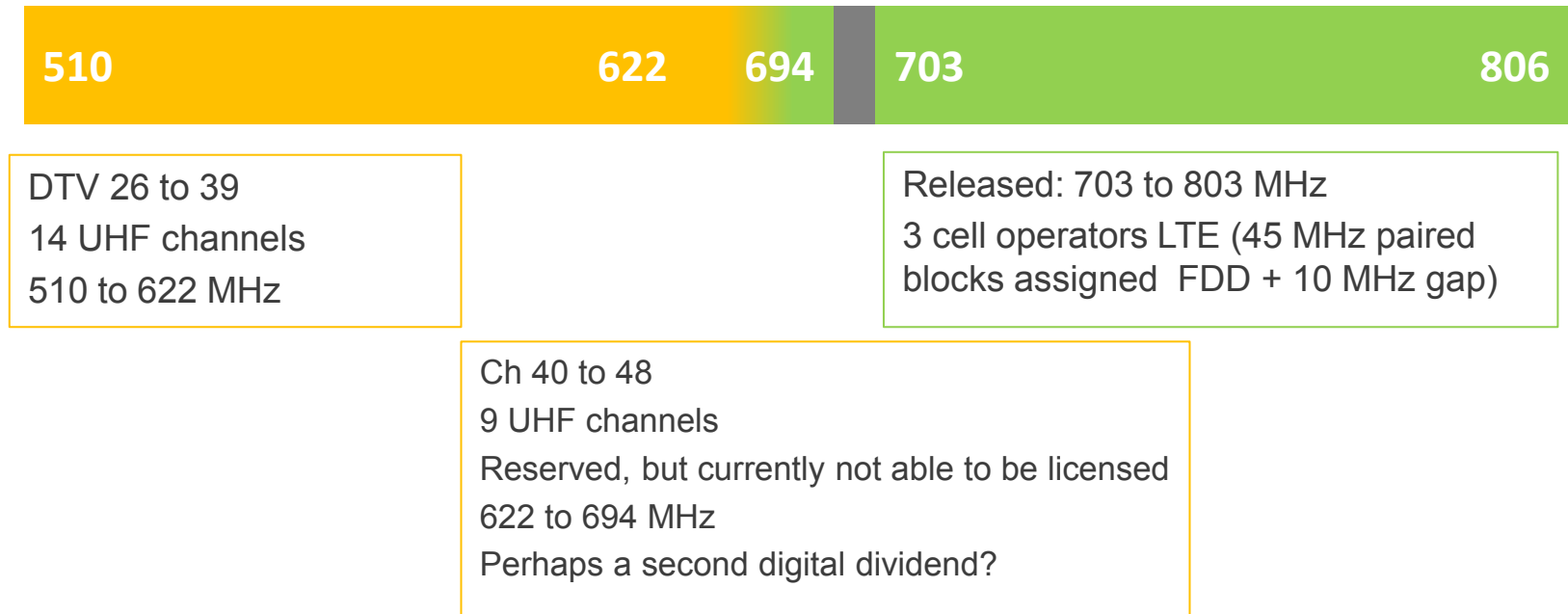
Total Assigned 376 MHz

- Spectrum Released:
 - VHF Band I 44 – 68 MHz
 - VHF Band III 174 – 230 MHz
 - UHF Band IV & V 702 – 806 MHz

Total Released 184 MHz
(104 MHz in UHF). *622-694 not available

NZ TV FREQUENCY PLAN

- UHF Band
- 8 MHz spaced raster



- Planned a national odd/even channel group, resulting in 7 services for each group
- Realised by V/H polarisation discrimination
- Helped by wide band UHF antennas already in marketplace



FREQUENCY PLANS EUROPE AND U.S.

■ Europe

- Wider UHF band than NZ, Ch21 to Ch 69 (470 to 862 MHz)
- First released above 790 MHz and 550–630 MHz (2006)
- Now releasing above 700 MHz and migrating into 550–606 MHz band

■ Asia Pacific Region

- Released above 700 MHz

■ US

- Released above 700 MHz
- Pair and unpaired blocks
- Upcoming release above 600 MHz (~2016)
 - Incentive or Reverse Auction
 - Followed by a traditional Forward Auction



PLANNING SUMMARY

- Plan for Digital TV channels as low as you can go
- Expect there will be future pressure to release below 700 MHz
- Harmonisation to allow global roaming
- Need to release the big chunk along with everyone else
- Enhanced DTV systems to get the most payload for spectrum use, e.g. DVB-T2 over DVB-T

