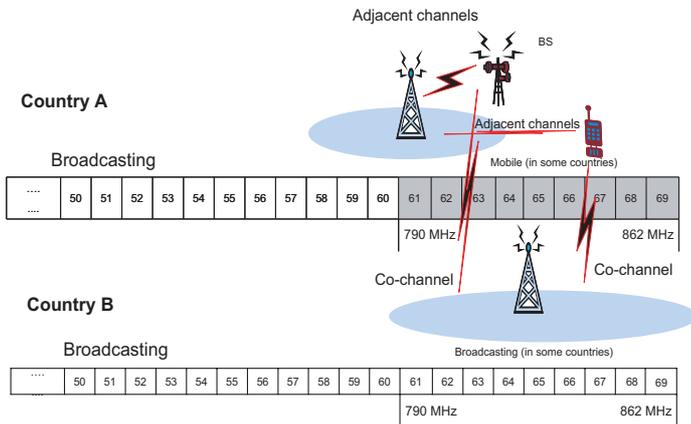
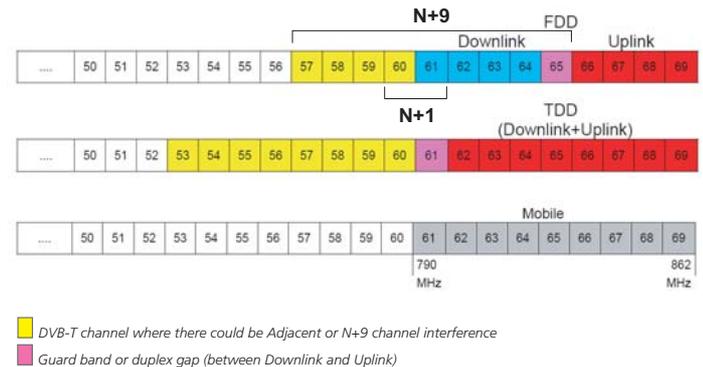


Compatibility issues between mobile telecoms and TV services in the UHF Bands IV/V



Some band-plan examples



Potential problems are still under investigation, but TV broadcasts must be protected from mobile telecoms transmissions. Possible solutions:

Protection of broadcasting from mobile downlink

- Adequate guard-bands and/or careful planning using mitigation techniques:
 - Cross polarisation (works only for the protection of fixed reception)
 - Critical spectrum mask on the mobile service base station
 - Transmitter power adjustment of the base stations
 - Transmitting antenna adjustment of the base station
- In the extreme:
 - Increasing the wanted broadcast field strength by implementing additional broadcast transmitters
 - Installing rejection filters at the broadcast receiving installations (works only for the protection of fixed reception)



Protection of broadcasting from mobile uplink

- Sufficiently large guard band
- Adequate maximum transmitting power of the mobile phones
- Sufficiently low out of band emissions



ITU preparatory work for WRC11

- Creation of JTG 5-6: To conduct sharing studies for Regions 1 and 3 in the band 790-862 MHz between the mobile service and other services in order to protect the services to which the frequency band is currently allocated.

Caution: there may well be the need for technical constraints on mobile telecoms services which wish to use the UHF sub-band.

For an illustration of what could happen if the Digital Dividend is spent unwisely, download the 3 minutes video on: http://www.ebu.ch/en/technical/where_has_my_picture_gone.php