

Joint work between:

- CRC (Canada)
- ETRI (Korea)
- UPV/EHU (Spain)

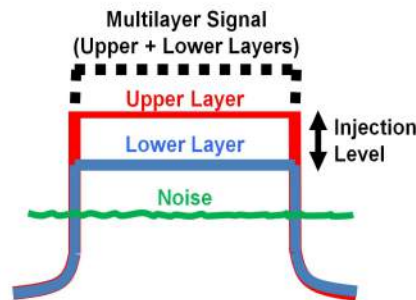


Concept Description

- Two synchronized signals on the same RF channel (Upper and Lower layers).

Upper Layer (Mobile)

- Intended for robust mobile services
- Ultra-robust signal
- Negative SNR threshold value

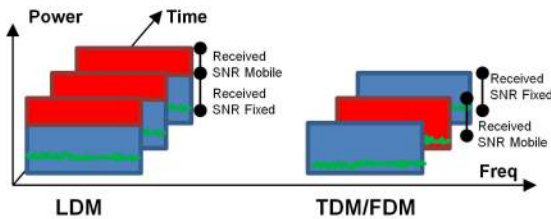


Lower Layer (Legacy)

- Intended for legacy high data rate fixed services (HDTV, UHDTV).
- Higher SNR threshold

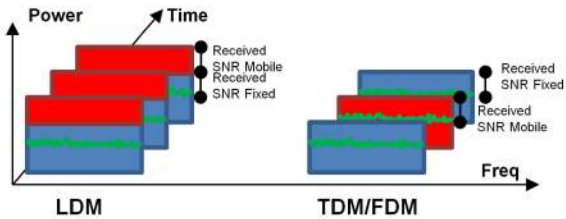
Flexibility and Efficiency

Low Noise (High SNR): Mobile and Fixed OK



- 100% time, frequency and power used
- 100% time and frequency used
- Received SNR Mobile higher than Mobile SNR Threshold → Wasted SNR

High Noise (Low SNR): Only Mobile OK



- 100% time, frequency and power used
- 100% frequency and power used
- Received SNR Fixed lower than Fixed SNR Threshold → Wasted Time

System Coverage



For more information:

Signal Processing and Radiocommunication Research Group (TSR) (www.ehu.es/tsr_radio)
 University of the Basque Country (UPV/EHU) Alameda Urquijo s/n 48013 Bilbao (SPAIN)

+34 94 601 4001 +34 94 601 4259 pablo.angueira@ehu.eus