# H:\AAA - daily web work\ACMA_Masthead__GREYSCALE_A4.jpg

Technical Framework Development  
700 MHz Spectrum Licence Band

## Radiocommunications Advisory Guidelines Methodology and parameters for the development of digital television coverage maps and exclusion zones

## Example coverage map with exclusion zone

This document serves as an informative Annex to the “700 MHz DTV map generation methodology” document (“the Methodology document”) posted on the TLG – 700 MHz Band Sharepoint site on 11 May 2012.

Figure 1 shows the individual components towards the generation of the exclusion zone for the protection of incumbent DTV services in the 700 MHz band from spectrum licensed services, prior to the completion of restack. These are:

1. the DTV coverage area boundary
2. the “back-of-antenna” exclusion zone component
3. the “main beam” exclusion zone component
4. the “total exclusion zone” (a combination of (b) and (c))

Referring to Table 2 in Section 2.1 of the Methodology document, the coverage edge boundary is defined as the “coverage edge at minimum median field strength”. The coverage area, bounded by the minimum median field strength of 54 dBµV/m, is shown in light green in Figure 1.

Referring to Section 3.5, there is a geographic separation requirement of 43 km from the DTV coverage edge, as explained in Section 3.2. The “back-of-antenna” exclusion zone component (or its boundary where overlapped by the main beam component) is shown in pink in Figure 1.

Referring to Section 3.5, there is a geographic separation requirement of 79 km from the DTV transmitter site, as explained in Section 3.3. The “main beam” exclusion zone component is shown in red in Figure 1.

Finally, as explained in Section 3.5 of the Methodology document, “the total exclusion zone [is] formed from the outer envelope of the overlay of both the corresponding ‘main beam’ and ‘back-of-antenna’ exclusion zone components.” The boundary of the total exclusion zone is shown by the dotted line in Figure 1.

It is reiterated explicitly that such exclusion zones will be generated for each incumbent DTV service in the 700 MHz band.

|  |
| --- |
| Figure Total exclusion zone bounded by the dotted line, comprised of the main beam exclusion zone component (red), and the back-of-antenna exclusion zone component (pink) around the DTV coverage area (light green) |
|  |
|  |