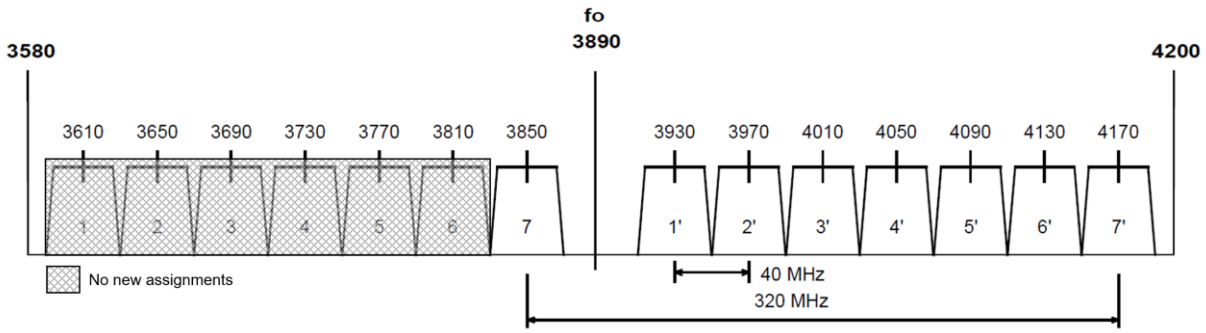
THE 3.8 GHz BAND (3580 - 4200 MHz)
RF CHANNEL ARRANGEMENTS



ASSIGNMENT INSTRUCTIONS

This band is designated for use by digital high capacity fixed point-to-point links.

Typical Use : 140 Mbit/s data
Assignment Priority : not specified
Minimum Path Length : 20 km
Antenna Requirements : refer to Appendix 11

Notes:

1. Proposed fixed links need to be coordinated with licensed earth stations operating in this band.
2. Requests for assignments within 150 km of the GPOs of Darwin (NT) or Geraldton (WA) are to be referred to the Manager, Spectrum Engineering Section, Spectrum Planning Branch for preliminary coordination consultation. ACMA file F1989/207, held by Manager, Spectrum Engineering Section, Spectrum Planning Branch, refers.
3. Some channels are not available for new assignments (Assignment Restrictions 1).
4. There is potential for interference to and from former 4.0 GHz band fixed services (Assignment Restrictions 2).
5. Proposed fixed links must be co-ordinated with fixed satellite services in this band (Assignment Restrictions 3).
6. Proposed fixed links must be co-ordinated with radiolocation services in this band (Assignment Restrictions 4).
7. Proposed fixed links must be co-ordinated with area-wide licence services in this band and cannot be licensed within an existing area-wide licence service spectrum space unless agreed to by the licensee (Assignment Restrictions 5).
8. Site sense compatibility (refer to section 3.3.3) and paired channel use does not apply in this band, if co-sited parties can reach an agreement.

References:

1. Rec. ITU-R F.635-6, *"Radio-frequency channel arrangements based on a homogeneous pattern for radio-relay systems operating in the 4 GHz band"*.
2. Spectrum Planning Discussion Paper 2006/01, *"Strategies for Wireless Access Services"*.

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ASSIGNMENT RESTRICTIONS

1. Channels that may not be assigned

Channels 1, 2, 3, 4, 5, and 6 are not available for assignment Australia-wide due to spectrum licensing in metro and regional areas, and to support the deployment of wireless broadband services in remote areas.

2. Coordination with existing fixed link assignments

Proposed new assignments must be coordinated with existing fixed link assignments in this band.

3. Coordination with fixed satellite service

The Australian Radiofrequency Spectrum Plan allocates the band 3600-4200 MHz to the fixed satellite service on a primary basis and the band is utilised by earth station receive services. Proposed new assignments are to be coordinated with these services.

4. Coordination with radio-location service

The Australian Radiofrequency Spectrum Plan allocates the band 3400-3600 MHz to the radiolocation service on a primary basis. Proposed new assignments are to be coordinated with these services.

5. Coordination with area-wide licence services

Proposed fixed links must be co-ordinated with services authorised under area-wide licences in this band as required in RALI MS 47 and cannot be licensed within an existing area-wide licence spectrum space unless agreed to by the licensee.

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PROTECTION RATIOS

Protection ratios for digital services are:

Co-channel	60 dB
First adjacent channel	30 dB
Second adjacent channel	0 dB

Note:

1. Protection ratios for digital systems are based on a 60 km path length and P_L (*Percentage of time that the average refractivity gradient in the lowest 100 m of the atmosphere is less than or equal to -100 N units/km*) of 20. For other path lengths and P_L values refer to the protection ratio correction factors graph on the following page.

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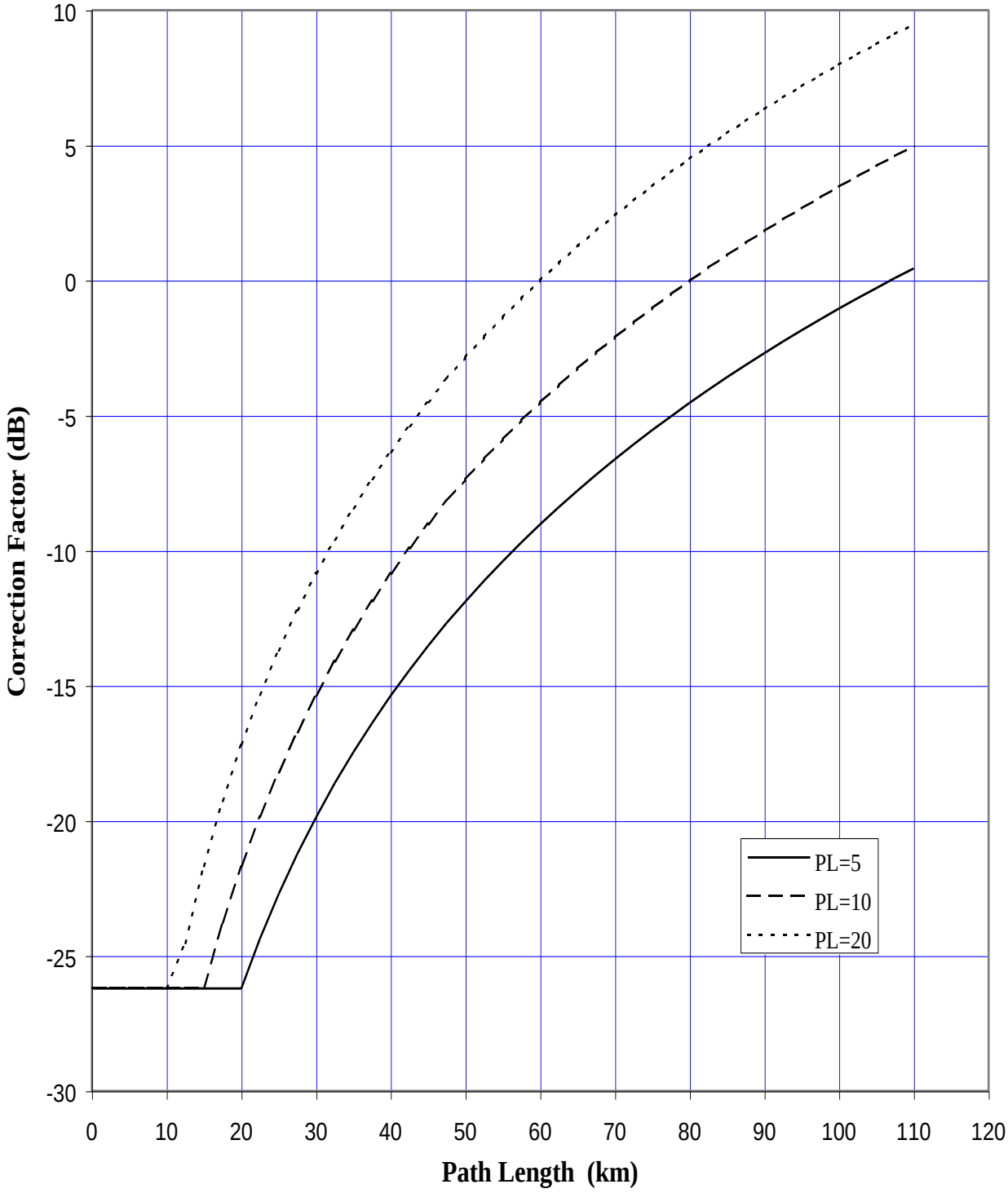
PROTECTION RATIO CORRECTION FACTORS

MULTI PATH



P_L: Percentage of time that the average refractivity gradient in the lowest 100 m of the atmosphere is less than or equal to -100 N units/km.

For further details refer to Annex A to Appendix 1.