Radiocommunications Assignment and Licensing Instruction

FREQUENCY PLAN FOR SERVICES IN THE 800 MHZ BAND
803 - 890 MHZ

AUSTRALIAN COMMUNICATIONS AND MEDIA AUTHORITY
SPECTRUM PLANNING AND ENGINEERING BRANCH

Amendment History

Date	Comments
August 2015	Initial draft covering material taken from the Radiocommunications 900 MHz Band Plan 1992
September 2015	Finalised RALI following public consultation. See Issue for Comment: Replacement of the 900 MHz Band Plan
July 2016	Updated to prepare for the transition of single frequency fixed services as per Milestone 1 of the 803-960 MHz review implementation plan, see: The ACMAs long-term strategy for the 803-960 MHz band. The primary change is to provide a new channelling raster for fixed services in the 845-849 MHz segment, and to remove redundant allocations in the 825-845 and 870-890 MHz segments.
August 2018	Updated to provide incremental allocation changes (contained in appendix A-D) to support the 803-960 MHz review implementation plan until completion.

Suggestions for improvements to Radiocommunications Assignment and Licensing Instruction MS 40 may be addressed to The Manager, Spectrum Engineering, ACMA at PO Box 78, Belconnen, ACT, 2616, or by e-mail to freqplan@acma.gov.au. It would be appreciated if notification to ACMA of any inaccuracy or ambiguity found be made without delay in order that the matter may be investigated, and appropriate action taken.

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FREQUENCY PLAN FOR THE 800 MHZ BAND 803 - 890 MHZ

1 Purpose

The purpose of this Radiocommunications Assignment and Licensing Instruction (RALI) is to set out spectrum planning arrangements for radiocommunications services in the frequency band 803 to 890 MHz (known as the 800 MHz Band). The RALI specifies the service allocations including the frequency limits of each allocation segment, and the channelling arrangements within these segments (where applicable).

This RALI, together with the related RALI MS 41 (for the 900 MHz band) replaces the *Radiocommunications 900 MHz Band Plan 1992* which ceased on 1 October 2015 under "sunsetting" provisions of the *Legislative Instruments Act 2003*.

In making decisions, accredited frequency assigners and the ACMA's officers should take all relevant factors into account and decide each case on its merits. Issues relating to this document that appear to fall outside the enunciated policy should be referred to the Manager, Spectrum Engineering Section, PO Box 78, Belconnen, ACT, 2616, or by e-mail to freqplan@acma.gov.au.

2 Future arrangements in this frequency band

The ACMA commenced a review of arrangements in the 803–960 MHz frequency band in May 2011 (the Review). The scope of the Review included services operating within the band 820-960 MHz, as well as consideration of future use of the 803-820 MHz segment vacated as part of the digital dividend. In November 2015, the ACMA completed the Review and released its decision in the paper: 'The ACMA's long-term strategy for the 803-960 MHz band' (the Decision paper). The Decision paper contains a range of decisions on reforms to the 803-960 MHz band, as well as a detailed plan for the implementation of these reforms (see Section 3.3 of the Decision paper).

This RALI provides incremental changes to the spectrum allocations in the 800 MHz band, effective at different points in time between 6 August 2018 and 1 July 2024 (contained in appendix A-D), to support the implementation of the new arraignments in the 800 MHz band. These incremental changes align with the Review implementation plan detailed in the Decision paper.[1] As such the spectrum allocations in Appendix D reflect the final arrangements in the band at the completion of the review implementation process.

Embargo 64 also supports the implementation of the Review outcomes and should be read in conjunction with this band plan.

Appendix A-D identify some frequency segments as being 'not allocated'. As detailed in the Decision paper, these segments are being cleared of legacy services with the intention of being designated for spectrum licensing in the future.

[1] It should be noted that the new two-frequency fixed link (804-806/849-851 MHz) and trunked land mobile (806-809/851-854 MHz) allocations will be created a year earlier than originally indicated in the Decision paper. This is to aid an earlier transition to the new frequency segments if licensees wish to do so. This does not impact the timeframes established in the Decision paper for incumbent services to vacate these frequency segments.

3 Spectrum arrangements

Spectrum allocation and channelling arrangements for the 800 MHz band are contained in the appendices to this RALI, and incrementally come into effect from the following dates.

- Appendix A – effective from 6 August 2018 until 30 June 2020
- Appendix B – effective from 1 July 2020 until 30 June 2023
- Appendix C – effective from 1 July 2023 until 30 June 2024
- Appendix D – effective from 1 July 2024

As detailed in the Decision paper, arrangements may be introduced to allow two frequency fixed links to access spectrum in the adjacent trunked land mobile segment (806-809/851-854 MHz) on a secondary basis as a means of alleviating potential congestion in the future (see section 3.2.3.1 of the Decision paper). These arrangements are currently not included in the spectrum allocations detailed in the appendices to this RALI. The ACMA will consider introduction of these arrangements at a future date if congestion issues arise.

3.1 Assignment Conditions

Services are to be assigned in accordance with this RALI.

Channelling arrangements other than those specified in this RALI may be authorised where such arrangements provide for more efficient use of the spectrum, when compared to the channelling arrangements specified for that segment in this RALI. In determining the spectrum efficiency of a service, without limiting the range of matters which may be taken into account, the following matters may be considered:

- Occupied bandwidth;
- Adjacent channel performance;
- The distance from the transmitter that the channel may be used again without causing harmful interference; and
- The impact that introduction of the service will have upon existing services

4 Relationship with RALI MS 41

One outcome of the Review was to separate planning arrangements for the 803-960 MHz band into two distinct band plans – RALI MS 40 for the 803-890 MHz band and RALI MS 41 for the 890-960 MHz band. The reasons for creating two separate band plans are twofold:

- To provide the flexibility needed to make future revisions, in particular to implement the outcomes of the Review; and
- To reflect a general change in community and industry-accepted nomenclature on the frequency extremes of both bands.

Although the planning arrangements in the range 803-960 MHz are now split between the two new administrative band plans, the following services are currently covered by both plans:

- Two frequency fixed services in the range 852-857/928-933 MHz (until 30 June 2021); and
- Radiolocation services in the range 850-915 MHz.

5 RALI Authorisation

Approved 06/08/2018

Mark Arkell
Manager
Spectrum Engineering Section
Spectrum Planning and Engineering Branch
Communications Infrastructure Division
Australian Communications and Media Authority

Appendix A: Allocation and Channelling Arrangements – effective from 6 August 2018 to 30 June 2020

The allocation and channelling arrangements for the 800 MHz band, effective from 6 August 2018 until 30 June 2020, are set out in the following figure and tables:

Figure 1: 800 MHz band services (803 - 890 MHz) diagram

Table 1: Service allocations and channelling arrangements for primary services

Table 2: Service allocations and channelling arrangements for secondary services

Figure 1: 800 MHz band (803 – 890 MHz) services diagram – effective from 6 August 2018 to 30 June 2020

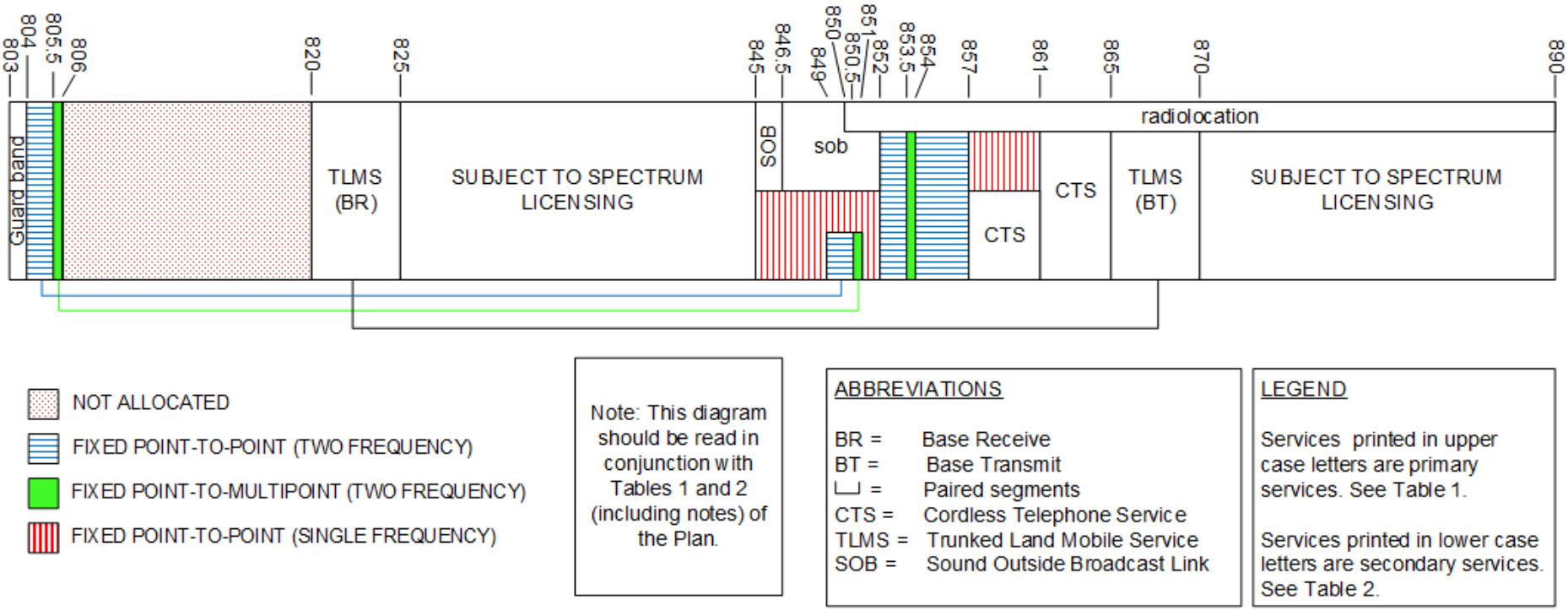

Table 1: Service allocations and channelling arrangements for primary services (notes 1 and 2) – effective from 6 August 2018 to 30 June 2020

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation	Paired segment (MHz)	Maximum channel bandwidth (kHz)	Channel centre frequency formula	Range of integer values for variable 'n' (inclusive)	First channel/last channel centre frequency (MHz)
1	803 - 804	Guard band (see note 3)					
2	804 – 805.5	Fixed point-to-point (two frequency)	849 - 850.5	200	803.99375 + n (0.0125)	1 to 120	804.00625 805.49375
3	805.5 - 806	Fixed point-to-multipoint (two frequency, base receive)	850.5 – 851	25	805.49375 + n (0.0125)	1 to 40	805.50625 805.99375
4	806 - 820	Not allocated (see note 4)					
5	820 – 825	Land Mobile Service (trunked, base receive) (see notes 5 and 6)	865 – 870	25	819.9875 + n (0.025)	1 to 200	820.0125 824.9875
6	825 - 845	Subject to spectrum licensing (see note 7)					
7	845 - 846.5	Fixed point-to-point (single frequency) (see note 8)		400	844.99375 + n (0.0125)	1 to 120	845.00625 846.49375
		Sound Outside Broadcast Link					

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation	Paired segment (MHz)	Maximum channel bandwidth (kHz)	Channel centre frequency formula	Range of integer values for variable 'n' (inclusive)	First channel/last channel centre frequency (MHz)
8	846.5 - 849	Fixed point-to-point (single frequency) (see note 8)		400	846.49375 + n (0.0125)	1 to 200	846.50625 848.99375
9	849 – 850.5	Fixed point-to-point (two frequency)	804 – 805.5	200	848.99375 + n (0.0125)	1 to 120	849.00625 850.49375
		Fixed point-to-point (single frequency) (see note 9)					
10	850.5 - 851	Fixed point-to-multipoint (two frequency, base transmit)	805.5 – 806	25	850.49375 + n (0.0125)	1 to 40	850.50625 850.99375
		Fixed point-to-point (single frequency) (see note 9)					
11	851 - 852	Fixed point-to-point (single frequency) (see note 9)					
12	852 – 853	Fixed point-to-point (two frequency) (see notes 10 and 11)		25	851.9875 + n (0.025)	1 to 40	852.0125 852.9875
13	853 – 853.5			12.5	852.99375 + n (0.0125) (see note 12)	1 to 40	853.00625 853.49375

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation	Paired segment (MHz)	Maximum channel bandwidth (kHz)	Channel centre frequency formula	Range of integer values for variable 'n' (inclusive)	First channel/last channel centre frequency (MHz)
14	853.5 - 854	Fixed point-to-multipoint (two frequency, base receive) (see notes 10 and 11)		12.5	853.49375 + n (0.0125) (see note 12)	1 to 40	853.50625 853.99375
15	854 - 857	Fixed point-to-point (two frequency) (see notes 11 and 13)		200	854 + n (0.05)	1 to 59	854.05 856.95
16	857 – 861	Fixed point-to-point (single frequency) (see notes 6 and 14)		25	856.9875 + n (0.025)	1 to 160	857.0125 860.9875
		Cordless Telephone Service (see notes 6 and 14)					
17	861 - 865	Cordless Telephone Service (see notes 6 and 15)		100	860.95 + n (0.1)	1 to 40	861.05 864.95
18	865 – 870	Land Mobile Service (trunked, base transmit) (see notes 5 and 6)	820 – 825	25	864.9875 + n (0.025)	1 to 200	865.0125 869.9875
19	870 – 890	Subject to spectrum licensing (see note 7)					

Notes:

1. The allocations for these primary services are represented in Figure 1.

2. The use of some allocations in Table 1 is limited during the Review implementation period – see spectrum embargo 64.

3. No services are to be assigned in the 803-804 MHz guard band.

4. No new assignments are to be made in this segment.

5. Segments referenced by this note may be authorised for use by users of:

    - land mobile services (two frequency), if such services are used in conjunction with a land mobile service (trunked); or
    - other land mobile services that make equivalent or more efficient use of the spectrum, as compared to the designated service allocation.

6. Stations operating under this service must cease operating in this segment by 30 June 2024.

7. On 15 July 1997, the Minister for Communications and the Arts declared that

    - throughout Australia, the bands 825-830 MHz, 835-845 MHz, 870-875 MHz and 880-890 MHz; and
    - in parts of Australia, the bands 830-835 MHz and 875-880 MHz,

    are subject to re-allocation by issuing spectrum licences. Furthermore, on 15 October 2000, the Minister for Communications, Information Technology and the Arts declared that further parts of Australia in the bands 830-835 MHz and 875-880 MHz are subject to re-allocation. No apparatus licences may be issued in bands and areas which are subject to spectrum licensing provisions, see spectrum embargo 26.

8. Services in this segment which were licensed prior to 1 July 2016 do not need to comply with the specified channelling arrangements, with the exception of the maximum channel bandwidth.

9. No new fixed point-to-point (single frequency) assignments are to be made in this segment. Existing fixed point-to-point (single frequency) links must cease operating in this segment by 30 June 2019. This allocation will conclude in this segment on 30 June 2019.

10. Services operated under this allocation are paired with 928-930 MHz which is allocated under the 900 MHz Plan.

11. Stations operating under this service must cease operating in this segment by 30 June 2021.

12. Where a demonstrated need exists for 25 kHz operation, two contiguous 12.5 kHz channels may be assigned frequencies offset by 6.25 kHz between the channel centre frequencies given by this formula.

13. Services operated under this allocation are paired with 930-933 MHz which is allocated under the 900 MHz Plan.

14. Special licensing and coordination arrangements apply to this service.

15. Equipment used in this service must comply with relevant ACMA mandated technical standards.

Table 2: Service allocations and channelling arrangements for secondary services (notes 1 and 2) – effective from 6 August 2018 to 30 June 2020

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation
1	846.5 - 850	Sound Outside Broadcast Link
2	850 – 852	Sound Outside Broadcast Link (see note 3)
		Radiolocation (see note 4)
3	852 - 890	Radiolocation (see note 4)

Notes:

1. The allocations for these secondary services are represented in Figure 1.
2. The use of some allocations in Table 2 is limited during the Review implementation period – see spectrum embargo 64.
3. Sound Outside Broadcast Links must cease operating in the frequency range 851 – 852 MHz by 30 June 2019. This allocation will conclude in the frequency segment 851-852 MHz on 30 June 2019.
4. Assignments to users other than the Department of Defence or the Australian Defence Force will not normally be authorised for this service. In this segment the service is primary in offshore areas.

Appendix B: Allocation and Channelling Arrangements from 1 July 2020 to 30 June 2023

The allocation and channelling arrangements for the 800 MHz band, effective from 1 July 2020 until 30 June 2023, are set out in the following figure and tables:

Figure 2: 800 MHz band services (803 - 890 MHz) diagram

Table 3: Service allocations and channelling arrangements for primary services

Table 4: Service allocations and channelling arrangements for secondary services

Figure 2: 800 MHz band (803 – 890 MHz) services diagram – effective from 1 July 2020 to 30 June 2023

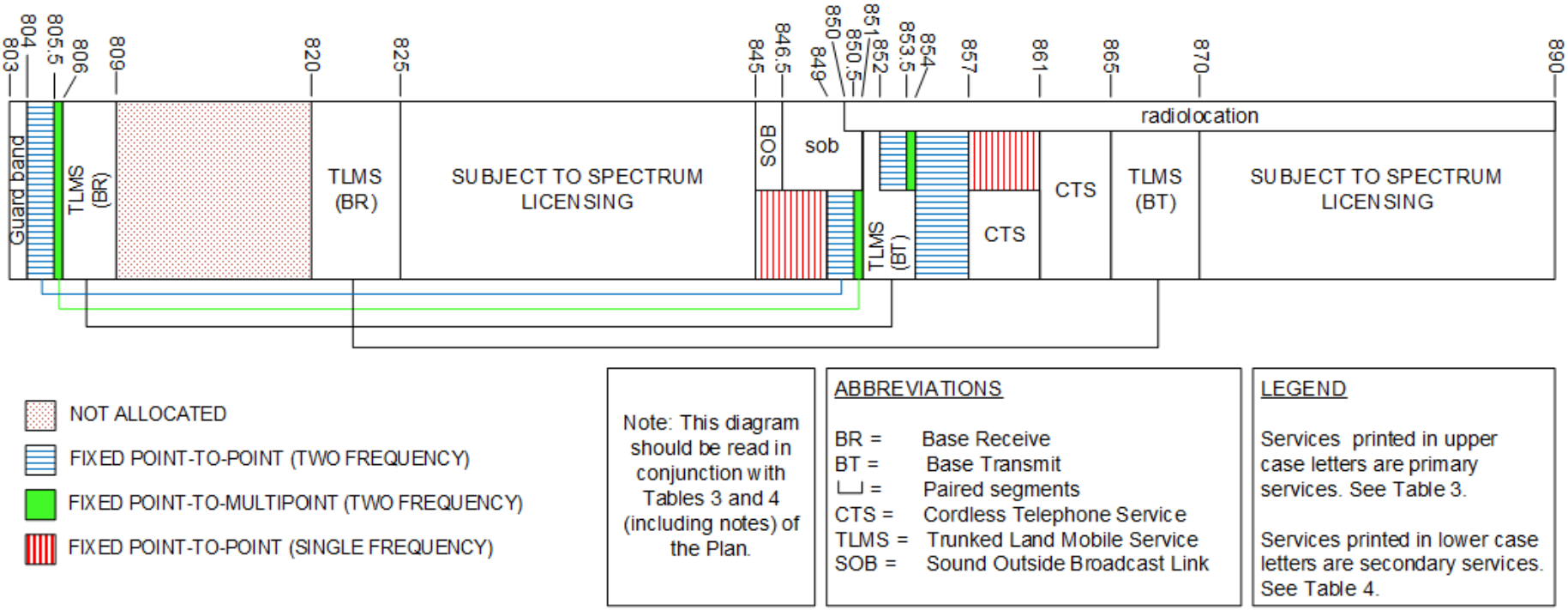

Table 3: Service allocations and channelling arrangements for primary services (notes 1 and 2) – effective from 1 July 2020 to 30 June 2023

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation	Paired segment (MHz)	Maximum channel bandwidth (kHz)	Channel centre frequency formula	Range of integer values for variable 'n' (inclusive)	First channel/last channel centre frequency (MHz)
1	803 – 804	Guard band (see note 3)					
2	804 – 805.5	Fixed point-to-point (two frequency)	849 – 850.5	200	803.99375 + n (0.0125)	1 to 120	804.00625 805.49375
3	805.5 – 806	Fixed point-to-multipoint (two frequency, base receive)	850.5 – 851	25	805.49375 + n (0.0125)	1 to 40	805.50625 805.99375
4	806 – 809	Land Mobile Service (trunked, base receive) (see note 4)	851 – 854	25	805.99375 + n (0.0125)	1 to 240	806.00625 808.99375
5	809 – 820	Not allocated (see note 5)					
6	820 – 825	Land Mobile Service (trunked, base receive) (see notes 4 and 6)	865 – 870	25	819.9875 + n (0.025)	1 to 200	820.0125 824.9875
7	825 – 845	Subject to spectrum licensing (see note 7)					
8	845 - 846.5	Fixed point-to-point (single frequency) (see note 8)		400	844.99375 + n (0.0125)	1 to 120	845.00625 846.49375

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation	Paired segment (MHz)	Maximum channel bandwidth (kHz)	Channel centre frequency formula	Range of integer values for variable 'n' (inclusive)	First channel/last channel centre frequency (MHz)
		Sound Outside Broadcast Link					
9	846.5 – 849	Fixed point-to-point (single frequency) (see note 8)		400	846.49375 + n (0.0125)	1 to 200	846.50625 848.99375
10	849 – 850.5	Fixed point-to-point (two frequency)	804 – 805.5	200	848.99375 + n (0.0125)	1 to 120	849.00625 850.49375
11	850.5 – 851	Fixed point-to-multipoint (two frequency, base transmit)	805.5 – 806	25	850.49375 + n (0.0125)	1 to 40	850.50625 850.99375
12	851 – 852	Land Mobile Service (trunked, base transmit) (see note 4)	806 – 807	25	850.99375 + n (0.0125)	1 to 80	851.00625 851.99375
13	852 – 853.5	Land Mobile Service (trunked, base transmit) (see note 4)	807 – 808.5	25	851.99375 + n (0.0125)	1 to 120	852.00625 853.49375
		Fixed point-to-point (two frequency) (see notes 9 and 10)					
14	853.5 – 854	Land Mobile Service (trunked, base transmit) (see note 4)	808.5 – 809	25	853.49375 + n (0.0125)	1 to 40	853.50625 853.99375

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation	Paired segment (MHz)	Maximum channel bandwidth (kHz)	Channel centre frequency formula	Range of integer values for variable 'n' (inclusive)	First channel/last channel centre frequency (MHz)
		Fixed point-to-multipoint (two frequency, base receive) (see notes 9 and 10)					
15	854 – 857	Fixed point-to-point (two frequency) (see notes 10 and 11)					
16	857 – 861	Fixed point-to-point (single frequency) (see notes 6 and 12)		25	856.9875 + n (0.025)	1 to 160	857.0125 860.9875
		Cordless Telephone Service (see notes 6 and 12)					
17	861 – 865	Cordless Telephone Service (see notes 6 and 13)		100	860.95 + n (0.1)	1 to 40	861.05 864.95
18	865 – 870	Land Mobile Service (trunked, base transmit) (see notes 4 and 6)	820 – 825	25	864.9875 + n (0.025)	1 to 200	865.0125 869.9875
19	870 – 890	Subject to spectrum licensing (see note 7)					

Notes:

1. The allocations for these primary services are represented in Figure 2.

2. The use of some allocations in Table 3 is limited during the Review implementation period – see spectrum embargo 64.

3. No services are to be assigned in the 803-804 MHz guard band.

4. Segments referenced by this note may be authorised for use by users of:

   - land mobile services (two frequency), if such services are used in conjunction with a land mobile service (trunked); or
   - other land mobile services that make equivalent or more efficient use of the spectrum, as compared to the designated service allocation.

5. No new assignments are to be made in this segment.

6. Stations operating under this service must cease operating in this segment by 30 June 2024.

7. On 15 July 1997, the Minister for Communications and the Arts declared that

   - throughout Australia, the bands 825-830 MHz, 835-845 MHz, 870-875 MHz and 880-890 MHz; and
   - in parts of Australia, the bands 830-835 MHz and 875-880 MHz,

   are subject to re-allocation by issuing spectrum licences. Furthermore, on 15 October 2000, the Minister for Communications, Information Technology and the Arts declared that further parts of Australia in the bands 830-835 MHz and 875-880 MHz are subject to re-allocation. No apparatus licences may be issued in bands and areas which are subject to spectrum licensing provisions, see spectrum embargo 26.

8. Services in this segment which were licensed prior to 1 July 2016 do not need to comply with the specified channelling arrangements, with the exception of the maximum channel bandwidth.

9. Services operated in this segment are paired with 928-930 MHz which is allocated under the 900 MHz Plan.

10. No new assignments are to be made under this allocation in this segment. Existing assignments under this allocation must cease operating in this segment by 30 June 2021. This allocation will conclude in this segment on 30 June 2021.

11. Services operated in this segment are paired with 930-933 MHz which is allocated under the 900 MHz Plan.

12. Special licensing and coordination arrangements apply to this service.

13. Equipment used in this service must comply with relevant ACMA mandated technical standards.

Table 4: Service allocations and channelling arrangements for secondary services (notes 1 and 2) – effective from 1 July 2020 to 30 June 2023

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation
1	846.5 - 850	Sound Outside Broadcast Link
2	850 – 851	Sound Outside Broadcast Link
		Radiolocation (see note 3)
3	851 - 890	Radiolocation (see note 3)

Notes:

1. The allocations for these secondary services are represented in Figure 2.
2. The use of some allocations in Table 4 is limited during the Review implementation period – see spectrum embargo 64.
3. Assignments to users other than the Department of Defence or the Australian Defence Force will not normally be authorised for this service. In this segment the service is primary in offshore areas.

Appendix C: Allocation and Channelling Arrangements from 1 July 2023 to 30 June 2024

The allocation and channelling arrangements for the 800 MHz band, effective from 1 July 2023 until 30 June 2024, are set out in the following figure and tables:

Figure 3: 800 MHz band services (803 - 890 MHz) diagram

Table 5: Service allocations and channelling arrangements for primary services

Table 6: Service allocations and channelling arrangements for secondary services

Figure 3: 800 MHz band (803 – 890 MHz) services diagram – effective from 1 July 2023 to 30 June 2024

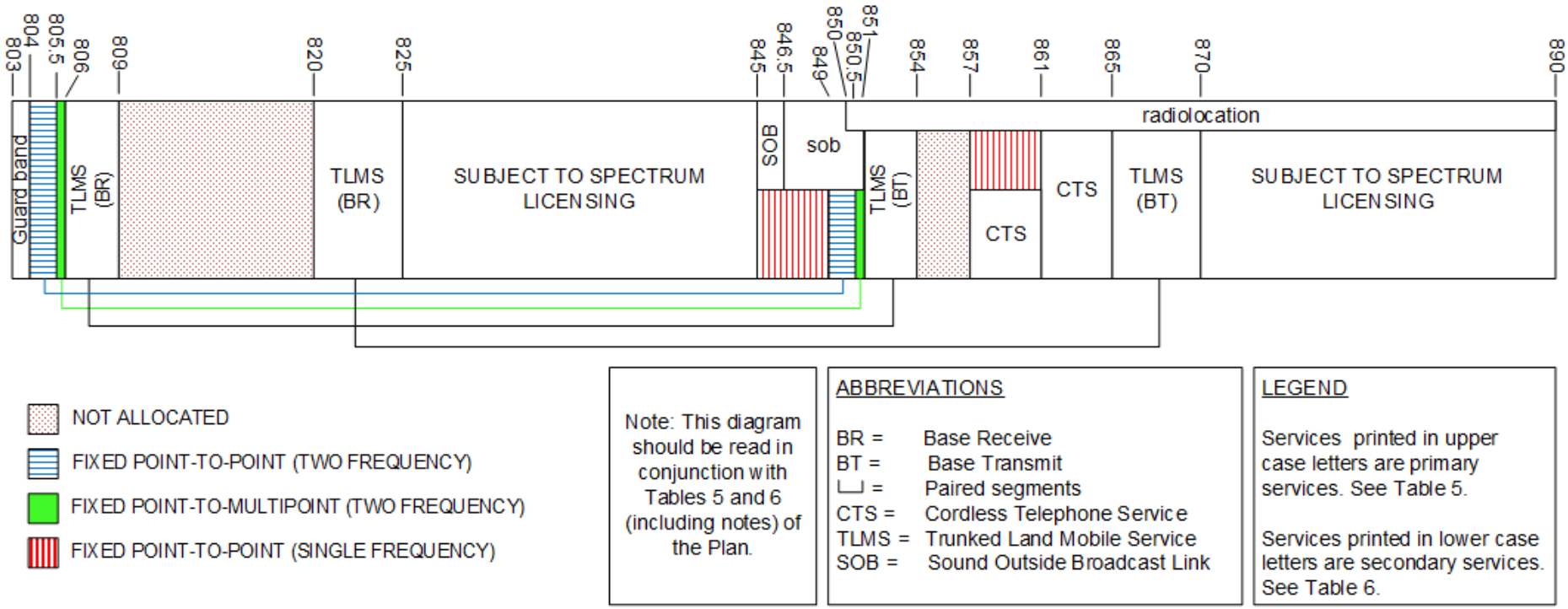

Table 5: Service allocations and channelling arrangements for primary services (notes 1 and 2) – effective from 1 July 2023 to 30 June 2024

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation	Paired segment (MHz)	Maximum channel bandwidth (kHz)	Channel centre frequency formula	Range of integer values for variable 'n' (inclusive)	First channel/last channel centre frequency (MHz)
1	803 - 804	Guard band (see note 3)					
2	804 – 805.5	Fixed point-to-point (two frequency)	849 – 850.5	200	803.99375 + n (0.0125)	1 to 120	804.00625 805.49375
3	805.5 - 806	Fixed point-to-multipoint (two frequency, base receive)	850.5 – 851	25	805.49375 + n (0.0125)	1 to 40	805.50625 805.99375
4	806 - 809	Land Mobile Service (trunked, base receive) (see note 4)	851 – 854	25	805.99375 + n (0.0125)	1 to 240	806.00625 808.99375
5	809 - 820	Not allocated (see note 5)					
6	820 – 825	Land Mobile Service (trunked, base receive) (see notes 4 and 6)	865 – 870				
7	825 - 845	Subject to spectrum licensing (see note 7)					
8	845 - 846.5	Fixed point-to-point (single frequency) (see note 8)		400	844.99375 + n (0.0125)	1 to 120	845.00625 846.49375

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation	Paired segment (MHz)	Maximum channel bandwidth (kHz)	Channel centre frequency formula	Range of integer values for variable 'n' (inclusive)	First channel/last channel centre frequency (MHz)
		Sound Outside Broadcast Link					
9	846.5 - 849	Fixed point-to-point (single frequency) (see note 8)		400	846.49375 + n (0.0125)	1 to 200	846.50625 848.99375
10	849 – 850.5	Fixed point-to-point (two frequency)	804 – 805.5	200	848.99375 + n (0.0125)	1 to 120	849.00625 850.49375
11	850.5 - 851	Fixed point-to-multipoint (two frequency, base transmit)	805.5 - 806	25	850.49375 + n (0.0125)	1 to 40	850.50625 850.99375
12	851 - 854	Land Mobile Service (trunked, base transmit) (see note 4)	806 – 809	25	850.99375 + n (0.0125)	1 to 240	851.00625 853.99375
13	854 - 857	Not allocated (see note 5)					
14	857 – 861	Fixed point-to-point (single frequency) (see note 6)					
		Cordless Telephone Service (see note 6)					
15	861 - 865	Cordless Telephone Service (see notes 6 and 9)					

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation	Paired segment (MHz)	Maximum channel bandwidth (kHz)	Channel centre frequency formula	Range of integer values for variable 'n' (inclusive)	First channel/last channel centre frequency (MHz)
16	865 – 870	Land Mobile Service (trunked, base transmit) (see notes 4 and 6)	820 – 825				
17	870 – 890	Subject to spectrum licensing (see note 7)					

Notes:

1. The allocations for these primary services are represented in Figure 3.
2. The use of some allocations in Table 5 is limited during the Review implementation period – see spectrum embargo 64.
3. No services are to be assigned in the 803-804 MHz guard band.
4. Segments referenced by this note may be authorised for use by users of:
    - land mobile services (two frequency), if such services are used in conjunction with a land mobile service (trunked); or
    - other land mobile services that make equivalent or more efficient use of the spectrum, as compared to the designated service allocation.
5. No new assignments are to be made in this segment.
6. No new assignments are to be made in this segment. Existing services under this allocation must cease operating in this segment by 30 June 2024. This allocation will conclude in this segment on 30 June 2024.
7. On 15 July 1997, the Minister for Communications and the Arts declared that
    - throughout Australia, the bands 825-830 MHz, 835-845 MHz, 870-875 MHz and 880-890 MHz; and
    - in parts of Australia, the bands 830-835 MHz and 875-880 MHz,

are subject to re-allocation by issuing spectrum licences. Furthermore, on 15 October 2000, the Minister for Communications, Information Technology and the Arts declared that further parts of Australia in the bands 830-835 MHz and 875-880 MHz are subject to re-allocation. No apparatus licences may be issued in bands and areas which are subject to spectrum licensing provisions, see spectrum embargo 26.

8. Services in this segment which were licensed prior to 1 July 2016 do not need to comply with the specified channelling arrangements, with the exception of the maximum channel bandwidth.

9. Equipment used in this service must comply with relevant ACMA mandated technical standards.

Table 6: Service allocations and channelling arrangements for secondary services (notes 1 and 2) – effective from 1 July 2023 to 30 June 2024

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation
1	846.5 - 850	Sound Outside Broadcast Link
2	850 – 851	Sound Outside Broadcast Link
		Radiolocation (see note 3)
3	851 - 890	Radiolocation (see note 3)

Notes:

1. The allocations for these secondary services are represented in Figure 3.
2. The use of some allocations in Table 6 is limited during the Review implementation period – see spectrum embargo 64.
3. Assignments to users other than the Department of Defence or the Australian Defence Force will not normally be authorised for this service. In this segment the service is primary in offshore areas.

Appendix D: Allocation and Channelling Arrangements – effective from 1 July 2024

The allocation and channelling arrangements for the 800 MHz band, effective from 1 July 2024, are set out in the following figure and tables:

Figure 4: 800 MHz band services (803 - 890 MHz) diagram

Table 7: Service allocations and channelling arrangements for primary services

Table 8: Service allocations and channelling arrangements for secondary services

Figure 4: 800 MHz band (803 – 890 MHz) services diagram – effective from 1 July 2024

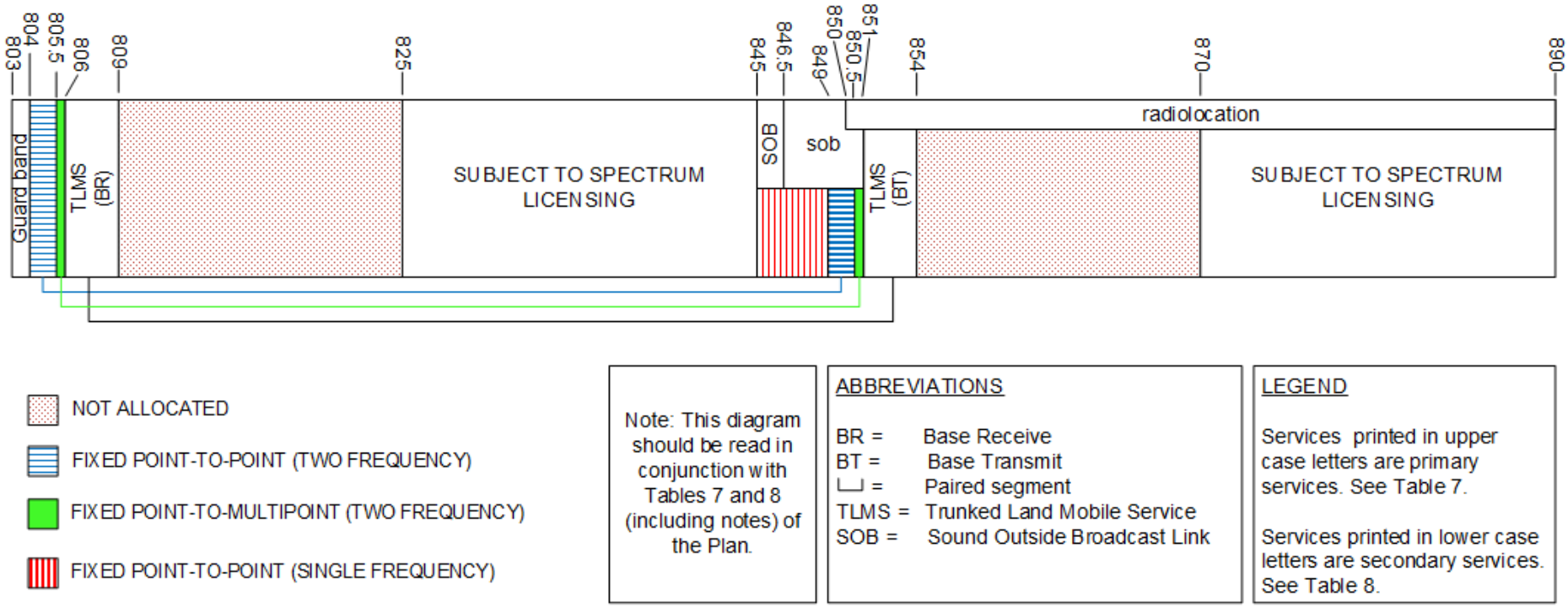

Table 7: Service allocations and channelling arrangements for primary services (note 1) – effective from 1 July 2024

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation	Paired segment (MHz)	Maximum channel bandwidth (kHz)	Channel centre frequency formula	Range of integer values for variable 'n' (inclusive)	First channel/last channel centre frequency (MHz)
1	803 - 804	Guard band (see note 2)					
2	804 – 805.5	Fixed point-to-point (two frequency)	849 – 850.5	200	803.99375 + n (0.0125)	1 to 120	804.00625 805.49375
3	805.5 - 806	Fixed point-to-multipoint (two frequency, base receive)	850.5 – 851	25	805.49375 + n (0.0125)	1 to 40	805.50625 805.99375
4	806 - 809	Land Mobile Service (trunked, base receive) (see note 3)	851 – 854	25	805.99375 + n (0.0125)	1 to 240	806.00625 808.99375
5	809 - 825	Not allocated (see note 4)					
6	825 - 845	Subject to spectrum licensing (see note 5)					
7	845 - 846.5	Fixed point-to-point (single frequency) (see note 6)		400	844.99375 + n (0.0125)	1 to 120	845.00625 846.49375
		Sound Outside Broadcast Link					
8	846.5 - 849	Fixed point-to-point (single frequency) (see note 6)		400	846.49375 + n (0.0125)	1 to 200	846.50625 848.99375

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation	Paired segment (MHz)	Maximum channel bandwidth (kHz)	Channel centre frequency formula	Range of integer values for variable 'n' (inclusive)	First channel/last channel centre frequency (MHz)
9	849 – 850.5	Fixed point-to-point (two frequency)	804 – 805.5	200	848.99375 + n (0.0125)	1 to 120	849.00625 850.49375
10	850.5 - 851	Fixed point-to-multipoint (two frequency, base transmit)	805.5 – 806	25	850.49375 + n (0.0125)	1 to 40	850.50625 850.99375
11	851 - 854	Land Mobile Service (trunked, base transmit) (see note 3)	806 – 809	25	850.99375 + n (0.0125)	1 to 240	851.00625 853.99375
12	854 - 870	Not allocated (see note 4)					
13	870 – 890	Subject to spectrum licensing (see note 5)					

Notes:

1. The allocations for these primary services are represented in Figure 4.
2. No services are to be assigned in the 803-804 MHz guard band.
3. Segments referenced by this note may be authorised for use by users of:
    - land mobile services (two frequency), if such services are used in conjunction with a land mobile service (trunked); or
    - other land mobile services that make equivalent or more efficient use of the spectrum, as compared to the designated service allocation.
4. No new assignments are to be made in this segment.
5. On 15 July 1997, the Minister for Communications and the Arts declared that
    - throughout Australia, the bands 825-830 MHz, 835-845 MHz, 870-875 MHz and 880-890 MHz; and

- in parts of Australia, the bands 830-835 MHz and 875-880 MHz,

are subject to re-allocation by issuing spectrum licences. Furthermore, on 15 October 2000, the Minister for Communications, Information Technology and the Arts declared that further parts of Australia in the bands 830-835 MHz and 875-880 MHz are subject to re-allocation. No apparatus licences may be issued in bands and areas which are subject to spectrum licensing provisions, see spectrum embargo 26.

6. Services in this segment which were licensed prior to 1 July 2016 do not need to comply with the specified channelling arrangements, with the exception of the maximum channel bandwidth.

Table 8: Service allocations and channelling arrangements for secondary services (note 1) – effective from 1 July 2024

Item	Segment frequency limits (MHz) (lower limit exclusion, upper limit inclusive)	Service allocation
1	846.5 - 850	Sound Outside Broadcast Link
2	850 – 851	Sound Outside Broadcast Link
		Radiolocation (see note 2)
3	851 - 890	Radiolocation (see note 2)

Notes:

1. The allocations for these secondary services are represented in Figure 4.
2. Assignments to users other than the Department of Defence or the Australian Defence Force will not normally be authorised for this service. In this segment the service is primary in offshore areas.