



DEPARTMENT OF DEFENCE
CORPORATE INFORMATION POLICY

Re: (c) 04/01/02
CC: Neil Bynan ✓
Paul Belin ✓

CP1-5-01
CANBERRA ACT 2600

Sub no - 298
ID no - 194

2001/30918/2

21 December 2001

Dr David Robertson
Commissioner
Productivity Commission
Locked Bag 2
Collins St East
Melbourne VIC 8003

Dear David,

Re: PRODUCTIVITY COMMISSION INQUIRY – RADIOCOMMUNICATIONS ACT

I have read the testimony by Mr Scott Stuart of the Hydro Electricity Commission, Tasmania (HEC) regarding the use of Defence spectrum for their microwave network, and thought it might be helpful to the Commission if I were to outline the circumstances.

The HEC was granted a licence, with the consent of Defence, in accordance with the policy formulated by the Department of Communications in 1982. This policy was subsequently adopted by the Spectrum Management Agency (SMA) on its establishment in 1992 and, later, the Australian Communications Authority in 1997. A copy of the original policy document signed by J.A. McKendry, a then Acting Assistant Secretary in the Department of Communications, is attached for your reference.

In correspondence between the SMA and Defence in 1992, 1994 and 1995, Defence consented to the HEC having access to the 8GHz band. As indicated by Mr Scott Stuart in his testimony to you, this access agreement was on condition of 'no interference/no protection' to and from existing Defence systems. This condition remains in force. Defence consented to this access as the area in which the HEC operates made the likelihood of harmful interference to Defence systems improbable. I have attached relevant correspondence for your information.

I do recognise Mr Shaw's concern that the HEC has an investment of some \$15m in its network, and that it would wish to see some certainty in its right to the use of the spectrum it shares with Defence. I hold similar concerns for the current Commonwealth investment in systems that operate in the bands. By way of example, Defence's current investment in the space segment of the Optus C1 Satellite alone exceeds \$350m.

You also noted during the testimony of Mr Stuart your surprise at the HEC having actually obtained access to Defence spectrum. A large number of other similar sharing arrangements have been negotiated with other users of these bands throughout Australia. Details of these agreements could be provided should it assist the Inquiry.

The concern expressed by the HEC does, however, point to a spectrum planning difficulty. The band pair 7.25-7.75 GHz and 7.9-8.4 GHz, in which the HEC microwave links operate, are allocated to satellite communications (down and up links respectively) as well as to other radio services. Portions of these bands are allocated to mobile satellite communications. The band pair is attractive for military use as they are the lowest frequency bands available to support medium capacity mobile satellite communications and the technology to exploit them is well proven, inexpensive and reliable. Their use for military satellite communications has been harmonised with our allies. In the USA these bands are entirely reserved for Government use; in other allied countries there are significant restrictions placed on the use of civil systems in these bands.

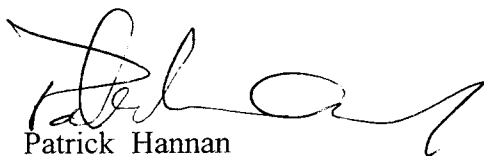
In Australia only small portions of the band pair are reserved exclusively for Defence, these are: 7.25-7.375 GHz and 7.9-7.975 GHz. It was recognised that these small portions would be inadequate to support longer term Defence requirements and certainly inadequate to support the requirements arising from a significant Defence emergency.

The policy developed by the then Department of Communications represented an attempt to find a compromise between military and civil needs, although this policy has now been abandoned. Today, outside of the small portions actually reserved for Defence, the bands are used to support fixed links with no further reference to future Defence requirements.

To help limit the coordination difficulties currently being experienced, Defence intends to introduce a computer assisted coordination procedure. However, as the population of fixed links in these bands grows, so too the difficulties are expected to grow.

My staff officer, Mr M Brown, will be pleased to assist you with further details should you need further clarification on this matter.

Yours faithfully



Patrick Hannan
Chief Information Officer

DEPARTMENT OF COMMUNICATIONS

MINUTE PAPER

TELEPHONE:

AREA CODE:

CONTACT OFFICER: FR 811

REFERENCE: JF;JR

Assistant Secretary
Operations Branch, RFM

7.5 GHz INTERIM ASSIGNMENT POLICY

References: A. AS Ops. Minute - 7.5 GHz Band of 18 February 1982
B. AS Ops. Minutes - International Satellite - Defence Systems, of 17 August 1981. — (S-7A) (121)

As a result of DDC/Defence/Telecom discussions on ATFA held 1 June 1982 current assignment policy set out in references A and B can be modified. The current situation is as follows:

7250-7375MHz

Allocated exclusively to FIXED-SATELLITE (S-to-E) and MOBILE-SATELLITE (S-to-E), normally for Defence use. No assignments are to be made to terrestrial services. Removal of existing terrestrial services from this band will be addressed separately. Band plan RFM-01/9 will be revised.

7375-7750MHz

Allocated to FIXED-SATELLITE (S-to-E) sharing with terrestrial services over the whole band, and MET-SAT (S-to-E) in part of the band. The exact co-ordination procedures to be followed to ensure satisfactory operation of space and terrestrial services have not yet been prepared. Meanwhile all proposed assignments in this band are to be referred to Planning and Development Branch for consultation with Defence and subsequent advice. This affects all channels in band plan RFM-01/10 and channels 1A and 1B in bandplan RFM 01/11.

7750-7900MHz

Allocated exclusively to FIXED and MOBILE (except AEM). Assignments may be made under existing Operations Branch procedures, but because of the overall 7/8 GHz band planning review required Planning and Development Branch is to be kept informed. This applies to channels 2 to 6 in band plan RFM-01/11.

7900-8025MHz

Allocated to FIXED-SATELLITE (E-to-S) and MOBILE-SATELLITE (E-to-S), normally for Defence use, and to terrestrial FIXED subject to geographical limitations, yet to be determined, in the sub-band 7900-7975 MHz. Meanwhile proposals for terrestrial assignments in the sub-band 7900-7975 MHz are to be referred to Planning and Development Branch for consultation with Defence and subsequent advice. This affects channels 7 and 8 in band plan RFM-01/11.

8025-8400MHz

Allocated to FIXED-SATELLITE (E-to-S) sharing with terrestrial and other space services. Assignments may be made to terrestrial services under existing Operations Branch procedures, with the warning to the user that Defence operations may at some time cause interference to the terrestrial assignment. This is to be in addition to the Standard Notice on licence now in use. Because the FIXED-SATELLITE allocations will normally be used by Defence, all proposed assignments in this band are to be notified to Planning and Development Branch and Defence, JCEB. This applies to channels 1' to 8' in band plan RFM-01/11.

Outstanding Assignment Proposals

Assignment queries held by Planning and Development Branch are being reviewed in light of the above policy and will be answered separately.

J. N. McKendry

J. N. MCKENDRY
Acting Assistant Secretary
Planning and Development Branch

11/4 4/6/82

4 June 1982



16

HEADQUARTERS AUSTRALIAN DEFENCE FORCE

Department of Defence
PO Box E33
Queen Victoria Terrace
CANBERRA ACT 2600

ACOPS CY7253/92
OPS 92/22371/1

16 October 1992

Assistant Secretary
Department of Transport & Communications
Radiocommunications Division
Radiocommunications Operations Branch
GPO Box 594
Canberra ACT 2601

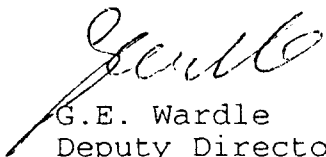
Attn: Ron James

FREQUENCY COORDINATION 7/8 GHZ BAND - TASMANIA

Reference:

A. DOTAC FAX 15:47 dated 1 Oct 92

1. Reference A requested coordination of Tasmanian Hydro Electric Commission Microwave links in the band 7732 MHz to 8251 MHz.
2. Use of the frequencies highlighted in Enclosure 1 are granted on a no interference to/no protection from Defence interests.
3. The point of contact within DCE is Mr David Kent, Engineer Spectrum Planning, Russell Offices F-G-42, ph 265 3670.


G.E. Wardle
Deputy Director Communications Engineering Spectrum Management



For your attention
Hurtle?



**Spectrum
Management
Agency**

Our ref: TH4204/46
Contact: Mr D Marsland (002) 205202

The SMA is a
Commonwealth
statutory agency

Deputy Director
Engineering Spectrum Management
Department of Defence
PO Box E33
Queen Victoria Terrace
CANBERRA ACT 2600

P1 - 039
92/22371

Attention: Mr George Wardle

**Subject: Coordination of frequency assignments in the 8.0
GHz Band**

Dear Sir

I notify and request your Departments' approval to permit the use of 8 GHz Band frequencies as detailed in the attached computer print-out listing.

The system is to be used by the Hydro-Electric Commission of Tasmania and will provide for state wide control and communications for that organisation. A copy of their plan is also provided for your records.

This is a revised arrangement of a system which was previously assigned by our Canberra Office and would have been notified to yourselves during 1992.

Please contact me if you have any queries in relation to this matter. As this service is awaiting licence issue prior to contract negotiations an early reply would be appreciated.

Yours faithfully

Dave Marsland
Senior Frequency Assigner

16th December 1994

R A D I O C O M M U N I C A T I O N S F O R A U S T R A L I A

4th Floor, 3 Brooke Street, Hobart TAS 7000 GPO Box 854J, Hobart TAS 7001
Tel: (002) 20 5267 Fax: (002) 23 7969



HEADQUARTERS AUSTRALIAN DEFENCE FORCE
Joint Communications Electronics Branch

Russell Offices, CANBERRA, ACT 2600

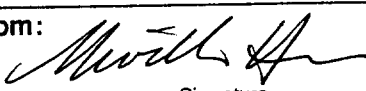
FAX No. (06) 265 0517

Classification: UNCLASSIFIED	Precedence: ROUTINE	Date/Time: 2/3/95
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PLEASE PASS TO: Dave Marsland - SMA Hobart	FAX # 002 23 7969	Pages: 1 of 1
	TEL # 002 20 5202	

Subject: Coordination of 8.0 GHz Band, Hydro-Electric Commission of Tasmania	Reference: TH4204/46 dated 16/12/94
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Remarks: 1. The reference sought coordination for frequencies in the 8GHz band for the Hydro-Electric Commission of Tasmania. The frequency list is detailed on the attachment to the reference dated 16 December 1994 and timed at 14:11:21. 2. Defence has no objection to the use of these frequencies on a no interference to/no protection from Defence systems basis. The probability of interference to and from existing and planned Defence systems is assessed as remote. Regards,
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From: 	Neville Hall	ESP1	(06)265 0131
Signature	Name	Position	Phone No.