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### **Preface**

The radio spectrum resource has been a fundamental element in the development of the Canadian telecommunications and broadcasting infrastructure. Canada's geography and diversity have historically promoted the development of advanced communications systems to link the country.

Radiocommunications exert a profound influence on Canada's growth and continuing prosperity. Canada is vitally dependent on the judicious use of the radio frequency spectrum for advancing national policies, achieving telecommunications, broadcasting and cultural goals, ensuring the security and welfare of the nation and conducting its domestic and foreign affairs.

Moreover, radiocommunications are an integral component of the Canadian information highway and the availability of spectrum allocations for new radio services and networks will greatly contribute to the achievement of Canada's strategy for the information highway.

In the Spring of 1993, Industry Canada initiated a comprehensive Spectrum Policy Review in part to take advantage of the new frequency allocations made by the 1992 World Administrative Radio Conference (WARC-92), in which Canada was an active participant and to accommodate increasing demand for spectrum by emerging radio services and existing service applications. Five public documents were released in 1993 by Industry Canada making proposals on a range of spectrum allocation and utilization issues to provide the basis for wide public consultation. The documents proposed a series of spectrum allocation modifications to the Canadian Table for, as a consequence of WARC-92, in the spectrum range 3 MHz to 164 GHz.

Based on the substantial public comments received and the findings from public meetings organized by industry, the Department is now issuing revisions to the Canadian Table of Frequency Allocations to adopt the new international allocations with appropriate modifications and provisions to reflect Canada's particular radio service needs and applications. As the discussion and reasons to support the modifications to the Canadian Table were well elaborated in the public documents released in 1993, only a few of the allocation changes will be rationalized in this document.

This document contains only those allocation changes to the frequency bands made by WARC-92 and by the Spectrum Review. Consequently, to get a full appreciation of the revisions to the Canadian Table, readers should use this document along with the existing Canadian Table issued in 1991. At an opportune time, Industry Canada will issue a revised edition of the Canadian Table of Frequency Allocations which will contain all the changes made up until 1994.

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#### 1. INTRODUCTION

As a consequence of the new frequency allocations made by the 1992 World Administrative Radio Conference (WARC-92) convened by the International Telecommunications Union (ITU) in Spain, and the ongoing demand for spectrum by new and existing radio services, Industry Canada undertook a comprehensive Spectrum Policy Review covering a wide range of spectrum allocation and utilization issues. During the second quarter of 1993 to initiate wide public consultation, the Department released the following spectrum proposal papers to address and propose:

- spectrum allocation in the HF band 3-30 MHz (Released May 15, 1993 by Gazette Notice DGTP-001-93);
- spectrum allocation and utilization in the range 30-960 MHz
   (Released July 17, 1993 by Gazette Notice DGTP-002-93/SMEP-011-93);
- spectrum allocation in the 1-3 GHz range (Released May 31, 1993 by Gazette Notice DGTP-003-93);
- spectrum allocation above 3 GHz (Released May 31, 1993 by Gazette Notice DGTP-004-93); and
- spectrum utilization for certain services above 1 GHz (Released June 7, 1993 by Gazette Notice DGTP-005-93/SMEP-006-93).

An extensive public consultation process on the above-mentioned policy proposal papers was undertaken during the third and fourth quarters of 1993. Proposals issued for public consultation were well-elaborated with rationalization for the proposed options; this was in addition to extensive consultation process with industry leading into WARC-92 and the participation of industry with the Department at the Conference in advising with regard to allocation issues and the Canadian interest. The Department has also benefitted from the wide range of consultation, public comments and the series of open forums organized by industry to discuss the issues among interested parties. Based on this extensive public consultation and representations by interested parties, Industry Canada is now issuing revisions to the Canadian Table of Frequency Allocations which incorporate most of the new allocations made at WARC-92 with particular provisions for domestic service needs.

In order to assist the reader in referring to the modifications being made to the 1991 edition of the Canadian Table of Frequency Allocations, Annex 2 provides a list of the bands that have been modified by this document. Also, it should be noted that in some cases where significant changes to the initial proposals have been made as a result of public consultation, Section 2 provides explanations for these changes.

#### 2. EXPLANATION FOR CERTAIN ALLOCATIONS CHANGES

In the public documents issued to carry-out public consultation on changes to the Canadian Table, a significant level of discussion and rationalization was presented to support the various allocation proposals. In a few cases due to the findings from this public consultation or further studies, the allocation changes being adopted in this document are somewhat different than the proposals made or require some further explanation. This section will address some of the provisions made in certain allocation changes in the Canadian Table in Section 3 and the new Canadian Footnotes in Section 5.

#### Mobile-Satellite Service in the Band 148-149.9 MHz and Between 1-3 GHZ.

The mobile satellite service has been added in a few narrow bands in the range 100-500 MHz to accommodate systems providing largely low capacity data services. Of particular interest is the band 148-149.9 MHz, previously allocated only to the fixed and mobile services. Following consultation, the mobile satellite service has been added in the band 148-150.05 MHz in accordance with the changes made internationally at the WARC-92. As a result of these discussions, it was decided that it was not necessary to add FN 608C as the intent of this note is superseded by the new Canadian footnote C26.

Mobile satellite services have been added in a number of bands in the 1-3 GHz range reflecting the results of the WARC-92. Principle among these is the improvement in the international basis for the allocation to the mobile satellite service in the bands 1525-1559 MHz and 1626.5-1660.5 MHz. Several additional bands have been allocated domestically to the mobile satellite service, notably 1970-2010/2160-2200 MHz and also 1610-1626.5/2483.5-2500 MHz. In addition mobile satellite allocations have also been made domestically in the bands 1515-1525 MHz and 1675-1700 MHz. Not all of the spectrum allocated to the mobile satellite service internationally has been brought into the domestic Table at this time due to consideration of coordinating with systems of other services. As well there is a requirement to coordinate with other services which will limit the ability to fully exploit these mobile satellite allocations.

# Mobile Service in the Band 890-960 Mhz

In the band 890-960 MHz, the allocations have been subdivided into smaller subbands than previously designated to more adequately support the spectrum utilization policy in this frequency range. In addition, the protection period for non-standard fixed stations licensed in these bands expired on July 1, 1991, subsequent to the release of the 1991 edition of the Canadian Table of Frequency Allocations. Consequently, the category of service for the fixed service has been changed to secondary except in those bands where new fixed or multipoint communications systems can be installed. The conditions of licence for existing fixed systems operating on a non-standard basis will continue to be governed by the Spectrum Utilization Policy, SP-896 MHz of September 1991.

# Broadcasting and Broadcasting-Satellite Services in the Band 1452 - 1492 MHZ

Broadcasting and Broadcasting-Satellite services have also been allocated to the band 1452-1492 MHz to support digital radio broadcasting. The terrestrial broadcasting service will be developed according to a Canadian allotment plan taking into account stations in the fixed service. New Canadian footnotes also take into account the existing fixed service in the implementation of the broadcasting service in this band.

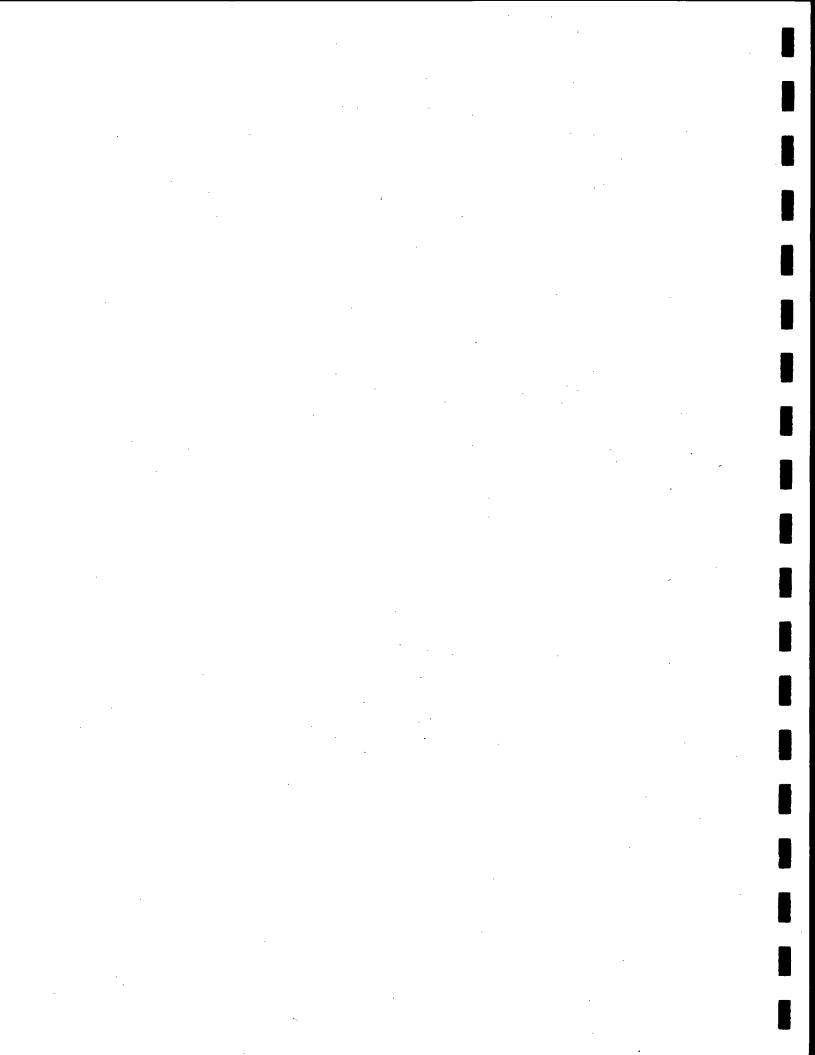
#### Personal communications in the 2 GHz Range

Personal communications, including Future Public Land Mobile Telecommunications Systems (FPLMTS), will be accommodated by the inclusion of the mobile service in the Table on a primary basis in the 2 GHz range. The actual utilization of frequency spectrum will be dealt with separately as a part of the promulgation of Spectrum Utilization Policy for personal communications. Allocations in the 2 GHz range have been developed with a view to retaining a minimum core of frequency spectrum for the fixed service in the long term. These are the bands 2025-2100/2200-2290 MHz in which it is shown that the fixed service can share with the various scientific satellite services.

#### 3. REVISIONS OF THE CANADIAN TABLE

This Section represents the new table entries being adopted in the Canadian Table of Frequency Allocations. These entries relate mainly to the allocation decisions of WARC-92 and reflect Canadian spectrum needs. For reference purposes, the new entries in the International Table made by WARC 92 for the bands affected are also included. As this section contains only those bands addressed by the 1992 Conference and the subsequent Spectrum Review, the reader may refer to Annex 2 for a quick overview of the bands covered in this section.

For the service definitions, frequency bands and International footnotes not covered in this document, the reader should refer to the 1991 edition of the Canadian Table.



CANADIAN ALLOCATION TABLE

5 680-5 730	AERONAUTICAL MOBILE (OR)
	501 505 C5
5 730-5 900	FIXED MOBILE except aeronautical mobile (R)
5 900-5 950	BROADCASTING 521A 521B FIXED MOBILE except aeronautical mobile (R) 521C C9
5 950-6 200	BROAOCASTING
6 200-6 525	MARITIME MOBILE 500A 5008 520 520B
6 525-6 685	AERONAUTICAL MOBILE (R)
6 685-6 765	AERONAUTICAL MOBILE (OR)
6 765-7 000	FIXED Land Mobile 524
7 000-7 100	AMATEUR 510 AMATEUR-SATELLITE
7 100-7 300	. AMATEUR 510 528
7 300-7 350	BROADCASTING 521A 521B FIXED Land Mobile 528A C9
7 350-8 100	FIXED Land Mobile

kHz
ITU ALLOCATION TO SERVICES

ITU ALLOCATION TO SERVICES		
REGION 1	REGION 2	REGION 3
5 680-5 730	AERONAUTICAL MOBILE (OR)	
	501 505	
5 730-5 900 FIXED LAND MOBILE	5 730-5 900 FIXED MOBILE except aeronautical mobile (R)	5 730-5 900 FIXED Mobile except aeronautical mobile (R)
5 900-5 950	BROADCASTING 521A 521B	
	521C	
5 950-6 200	BROADCASTING	
6 200-6 525	MARITIME MOBILE 500A 5	008 520 5208
	522	
6 525-6 685	AERONAUTICAL MOBILE (R)	
6 685-6 765	AERONAUTICAL MOBILE (OR)	
6 765-7 000	FIXED Land Mobile 525	
	524	
7 000-7 100	AMATEUR 510 AMATEUR-SATELLITE	
	526 527	
7 100-7 300 BROADCASTING	7 100-7 300 AMATEUR 510	7 100-7 300 BROADCASTING
	528	
7 300-7 350	BROADCASTING 521A 52	1B
	528A	
7 350-8 100	FIXED Land Mobile	
	529	

8 100-8 195	FIXED MARITIME MOBILE
8 195-8 815	MARITIME MOBILE 500A 500B 520B 529A
	501
8 815-8 965	AERONAUTICAL MOBILE (R)
8 965-9 040	AERONAUTICAL MOBILE (OR)
	C5
9 040-9 400	FIXED
9 400-9 500	BROADCASTING 521A 521B FIXED
	529B C9
9 500-9 900	BROADCASTING
·	530 531
9 900-9 995	FIXED
9 995-10 003	STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz)
	501
10 003-10 005	STANDARD FREQUENCY AND TIME SIGNAL Space Research
	501
10 005-10 100	AERONAUTICAL MOBILE (R)
	501 .
10 100-10 150	AMATEUR 510
	<sup>'</sup> C6
	,

ITU ALLOCATION TO SERVICES

REGION 1	REGION 2 REGION 3	
8 100-8 195	FIXED MARITIME MOBILE	
8 195-8 815	MARITIME MOBILE 500A 500B 520B 529A 501	
8 815-8 965	AERONAUTICAL MOBILE (R)	
8 965-9 040 ·	AERONAUTICAL MOBILE (OR)	
9 040-9 400	FIXED	
9 400-9 500	BROADCASTING 521A 521B	
	529B	
9 500-9 900	BROADCASTING	
	530 531	
9 900-9 995	FIXED	
	,	
9 995-10 003	STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz)	
	501	
10 003-10 005	STANDARD FREQUENCY AND TIME SIGNAL . Space Research	
	501	
10 005-10 100	AERONAUTICAL MOBILE (R)	
	501	
10 100-10 150	FIXED Amateur 510	

kHz
CANADIAN ALLOCATION TABLE

II .	
10 150-11 175	FIXED Mobile except aeronautical mobile (R)
11 175-11 275	AERONAUTICAL MOBILE (OR)
	C5
11 275-11 400	AERONAUTICAL MDBILE (R)
11 400-11 600	FIXED
11 600-11 650	BROADCASTING 521A 521B FIXED
	529B C9
11 650-12 050	BROADCASTING
•	531
12 050-12 100	BROADCASTING 521A 521B FIXED
	529B C9
12 100-12 230	FIXED
12 230-13 200	MARITIME MOBILE 500A 500B 520B 529A
13 200-13 260	AERONAUTICAL MOBILE (OR)
1,3 260-13 360	AERONAUTICAL MOBILE (R)
13 360-13 410	FIXED RADIO ASTRONOMY ,
	533
13 410-13 570	FIXED MOBILE except aeronautical mobile (R)
J	534

kHz

REGION 1	REGION 2	REGION 3
10 150-11 175	FIXED Mobile except aeronautical mobile (R)	
11 175-11 275	AERONAUTICAL MOBILE (OR)	
11 275-11 400	AERONAUTICAL MOBILE (R)	
11 400-11 600	FIXED	
11 600-11 650	BROADCASTING 521A 521	В .
	529B	
11 650-12 050	BROADCASTING	
12 050-12 100	530 531 BROADCASTING 521A 521	В
	529B	
12 100-12 230	FIXED .	
12 230-13 200	MARITIME MOBILE 500A 50	008 520B 529A
13 200-13 260	AERONAUTICAL MOBILE (OR)	
13 260-13 360	AERONAUTICAL MOBILE (R)	
13 360-13 410 ·	FIXED RADIO ASTRONOMY	
	533	
13 410-13 570	FIXED Mobile except aeronautical mo	obile (R)
	534	

13 570-13 600	BROADCASTING 521A 521B
	FIXED
	MOBILE except aeronautical mobile (R)
	534A C9
13 600-13 800	BROADCASTING
	531
13 800-13 870	BROADCASTING 521A 521B FIXED
	Mobile except aeronautical mobile (R)
	534A C9 .
13 870-14 000	FIXED
	Mobile excépt aeronautical mobile (R)
14 000-14 250	
	AMATEUR 510
,	AMATEUR-SATELLITE
14 250-14 350	AMATEUR 510
<b>*</b>	
14 350-14 990	
	FIXED  Mobile except aeronautical mobile (R)
14 990-15 005	
	STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz)
	501
15 005-15 010	CTANDADD EDECUENICY AND THAT CICAL
	STANDARD FREQUENCY AND TIME SIGNAL Space Research
15 010-15 100	
	AERONAUT(CAL MOBILE (OR)
	C5
15 100-15 600	BROADCASTING
	٠.
	531
	BROADCASTING 521A 521B
	FIXED
	5298 C9

kHz ITU ALLOCATION TO SERVICES

PECION 1	BEGION 3	DECION 2
REGION 1 13 570-13 600	REGION 2	REGION 3
13 570-13 600	BROADCASTING 521A 521	В
	534A	
13 600-13 800	3347	
13 000-13 000	BROADCASTING	
	531	
13 800-13 870		
	BROADCASTING 521A 521	В
	534A	
13 870-14 000		
	FIXED  Mobile except aeronautical mo	nbile (R)
	, , , , , , , , , , , , , , , , , , ,	
14 000-14 250		
14 000-14 250	AMATEUR 510	•
٠ ,	AMATEUR-SATELLITE	
14 250-14 350	AMATEUR 510	
	535	
14 350-14 990	FIXED	
·	Mobile except aeronautical mo	obile (R)
14 990-15 005		
	STANDARD FREQUENCY AND (15 000 kHz)	D TIME SIGNAL
	501	
15 005-15 010	301	
13 003-13 010	STANDARD FREQUENCY AND	D TIME SIGNAL
	Space Research	
15 010-15 10Ò	AERONAUTICAL MOBILE (DR	,
	AEMONAUTICAL MODILE (DA	′
15 100-15 600	BROADCASTING	·
	531	
15 600-15 800		1
15 000-15 000	BROADCASTING 521A 521	в .
	529B	

kHz
CANADIAN ALLOCATION TABLE

15 800-16 360	FIXED
16 360-17 410	MARITIME MOBILE 500A 500B 520B 529A
17 410-17 480	FIXED
17 480-17 550	BROADCASTING 521A 521B FIXED
	529B C9
17 550-17 900	BROADCASTING
	531
17 900-17 970	AERONAUTICAL MOBILE (R)
17 970-18 030	AERONAUTICAL MOBILE (OR)
18 030-18 052	FIXED
18 052-18 068	FIXED Space Research
18 068-18 168	AMATEUR 510 AMATEUR-SATELLITE
18 168-18 780	FIXED
18 780-18 900	MARITIME MOBILE
18 900-19 020	BROADCASTING 521A 521B FIXED
	529B C9

ITU ALLOCATION TO SERVICES

	TTO ALLOCATION TO SERVICES	
REGION 1	REGION 2	REGION 3
15 800-16 360	FIXED	
	536	
16 360-17 410	MARITIME MOBILE 500A 50	00B 520B 529A
17 410-17 480	FIXED	•
17 480-17 550	BROADCASTING 521A 521	В
,	529B	
17 550-17 900	BROADCASTING	
	531	
17 900-17 970	AERONAUTICAL MOBILE (R)	
17 970-18 030	AERONAUTICAL MOBILE (OR	
18 030-18 052	FIXED	
18 052-18 068	FIXED Space Research	
18 068-18 168	AMATEUR 510 AMATEUR-SATELLITE 538	
18 168-18 780	FIXED Mobile except aeronautical mo	obile
18 780-18 900	MARITIME MOBILE	
18 900-19 020	BROADCASTING 521A 521	В _
	529B	

kHz
CANADIAN ALLOCATION TABLE

19 020-19 680	FIXEO
19 680-19 800	MARITIME MOBILE 520B
19 800-19 990	FIXED
19 990-19 995	STANDARD FREQUENCY AND TIME SIGNAL Space Research
	501
19 995-20 010	STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz)
	501
.20 010-21 000	FIXED Mobile
21 000-21 450	AMATEUR 510 AMATEUR-SATELLITE
21 450-21 850	BROADCASTING
	531
21 850-21 870	FIXED
21 870-21 924	AERDNAUTICAL FIXED
21 924-22 000	AERONAUTICAL MOBILE (R)
22 000-22 855	MARITIME MOBILE 520B
22 855-23 000	FIXED

. kHz
ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3
19 020-19 680	FIXED	
19 680-19 800	MARITIME MOBILE 520B	·
19 800-19 990	FIXED	
19 990-19 995	STANDARD FREQUENCY ANI Space Research	D TIME SIGNAL
19 995-20 010	,	
13 335-20 010	STANDARD FREQUENCY AND (20 000 kHz)	D TIME SIGNAL
	501	
20 010-21 000	FiXED Mobile	
21 000-21 450	AMATEUR 510 AMATEUR-SATELLITE	
21 450-21 850	BROADCASTING 531	
24 050 04 020	551	
21 850-21 870	FIXED	·
	539	
21 870-21 924	AERONAUTICAL FIXED	
21 924-22 000	AERONAUTICAL MOBILE (R)	
22 000-22 855	MARITIME MOBILE 520B	·
22 855-23 000	FIXED .	
	540	· .

75.2-76	FIXED MOBILE
	572
76-108 ·	BROADCASTING
	· .
108-117.975	AERONAUTICAL RADIONAVIGATION
117.975-137	AERONAUTICAL MOBILE (R)
	501 592 593 595
137-137.025	001 002 000 000
	SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 599B Space Research (space-to-Earth)
	599A
137.025-137.175	SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) Space Research (space-to-Earth) Mobile-Satellite (space-to-Earth) 599B
	599A

MHz ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3
75.2-87.5 FIXED MOBILE except aeronautical mobile		
	75.4-76 FIXED MOBILE	75.4-87 FIXED . MOBILE
	76-88 BROADCASTING Fixed Mobile	573 574 577 579
565 571 572 575 578	576	87-100
87.5-100 BROADCASTING	88-100 BROADCASTING	FIXED MOBILE BROADCASTING
581 582		580
100-108	BROADCASTING	ale y consequence
	582 584 585 586 587 5	88 589
108-117.975	AERONAUTICAL RADIONAV	IGATION
	590A	
117.975-136	AERONAUTICAL MOBILE (R)	
	501 591 592 593 594	
136-137	AERONAUTICAL MOBILE (R) Fixed Mobile except aeronautical m	obile (R)
	591 594A 595	
137-137.025	SPACE OPERATION (space-to METEOROLOGICAL-SATELLI SPACE RESEARCH (space-to- MOBILE-SATELLITE (space-to- Fixed Mobile except aeronautical ma	TE (space-to-Earth) Earth) -Earth) 599B
	596 597 598 599 599A	
137,025-137.175	SPACE OPERATION (space-to- METEOROLOGICAL-SATELLIT SPACE RESEARCH (space-to- Mobile-Satellite (space-to-Eart Fixed Mobile except aeronautical mu	FE (space-to-Earth) Earth) h) 599B
	596 597 598 599 599A	

# MHz

#### CANADIAN ALLOCATION TABLE

137.175-137.825	SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) 599B Space Research (space-to-Earth)
137.825-138	SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) Space Research (space-to-Earth) Mobile-Satellite (space-to-Earth) 5998
138-144	599A
	LAND MOBILE Space Research (space-to-Earth)
	·
144-146	AMATTIID E40
146-148	AMATEUR 510 AMATEUR-SATELLITE
	AMATEUR
•	FIXED LAND MOBILE MOBILE-SATELLITE (Earth-to-space) 599B
	608 608A C26

# MHz ITU ALLOCATION TO SERVICES

DECION 1	DECION 2	DECION 2
REGION 1	REGION 2	REGION 3
137.175-137.825	SPACE OPERATION (space-t METEOROLOGICAL-SATELLI SPACE RESEARCH (space-to MOBILE-SATELLITE (space-to Fixed Mobile except aeronautical m 596 597 598 599 599A	TE (space-to-Earth) -Earth) o-Earth) 599B
137.825-138		
	SPACE OPERATION (space-to- METEOROLOGICAL-SATELLI SPACE RESEARCH (space-to- Mobile-Satellite (space-to-Ear Fixed Mobile except aeronautical m	TE (space-to-Earth) -Earth) th) 599B
	596 597 598 599 599A	
138-143.6 AERONAUTICAL MOBILE (OR)	138-143.6 FIXED MOBILE /RADIOLOCATION/ Space Research (space-to-Earth)	138-143.6 FIXEO MOBILE Space Research (space-to-Earth)
600 601 602 604		599 603
143.6-143.65 AERONAUTICAL MOBILE (OR) SPACE RESEARCH (space-to-Earth)	143.6-143.65 FIXED MOBILE SPACE RESEARCH (space-to-Earth) /RADIOLOCATION/	143.6-143.65 FIXED MOBILE SPACE RESEARCH (space-to-Earth)
601 602 604		599 603
143.65-144 AERONAUTICAL MOBILE (OR)	143.65-144 FIXED MOBILE //RADIOLOCATION/ SPACE RESEARCH (space-to-Earth)	143.65-144 FIXED MOBILE SPACE RESEARCH (space-to-Earth)
600 601 602 604		599 603
144-146	AMATEUR 510 AMATEUR-SATELLITE	
	605 606	
146-148 FIXED MOBILE except aeronautical mobile (R)	146-148 AMATEUR	146-148 AMATEUR FIXED MOBILE
608	607 ·	607
148-149.9 FIXED MOBILE except aeronautical mobile (R) MOBILE-SATELLITE (Earth-to-space) 5998	148-149.9 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 599B	
60B 608A 608C	608 608A 608C	

#### MHz

149.9-150.05		
	RADIONAVIGATION-SATELLITE MOBILE-SATELLITE (Earth-to-space) 599B 609B	
	MODILE-SATELLITE (Latti-to-space) 5998 6098	
	608B 609 609A	
150.05-156.7625		
	MOBILE	
	Fixed	
	ů.	
	•	
,		
	•	
	613 613A	
156.7625-156.8375		
	MARITIME MOBILE (distress and calling)	
	501 613	
	501 613	
156.8375-174	MOBILE	
	Fixed	
	613	
174-216		
	BROADCASTING	
	·	
216-220		
	FIXED . MARITIME MOBILE	
	LAND MOBILE 627A	
	•	
220-225		
	AMATEUR	
	!	
	i	
225-235		
	FIXED	
	MOBILE	
	İ	
	C5	

ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3
149.9-150.05	RADIONAVIGATION-SATELL LAND MOBILE-SATELLITE (E	
	608B 609 609A	
150.05-153 FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY 610	150.05-156.7625 FIXED MOBILE	
153-154 FIXED MOBILE except aeronautical mobile (R) Meteorological Aids		
154-156.7625 FIXED MOBILE except aeronautical mobile (R) 613 613A	611 613 613A	
156.7625-156.8375	1	
	MARITIME MOBILE (distress	and calling)
	501 613	
156.8375-174 FIXED MOBILE except aeronautical mobile (R) 613 613B 615	156.8375-174 FIXED MOBILE 613 616 617 618	
174-223 BROADCASTING	174-216 BROADCASTING Fixed Mobile 620	174-223 FIXED MOBILE BROADCASTING
221 222 222	216-220 FIXED . MARITIME MOSILE Radiolocation 627 627A	
621 623 628 629	220-225	619 624 625 626 630
223-230 BROADCASTING Fixed Mobile	AMATEUR FIXED MOBILE Radiolocation 627	223-230 FIXED MOBILE BROADCASTING AERONAUTICAL RADIONAVIGATION Radiolocation
622 628 629 631 632 635	225-235	636 637
23D-235 FIXED MOBILE	FIXED MOBILE	230-235 FIXED MOBILE AERONAUTICAL RADIONAVIGATION
629 632 635 638 639		637

M

### FIXED MOBILE    501 592 641 642 C5 C8		
### PROPRIET  ##	235-273	
### PROPRIET  ##		
### PROPRIET  ##		
### PROPRIET  ##		
FIXED MOBILE  641 C5 C8  312-315  FIXED MOBILE Mobile-Satellite (Earth-to-space) 641 641A  C5 C8  315-328.6  FIXED MOBILE  641 C5 C8  328.6-335.4  AERONAUTICAL RADIONAVIGATION 645  335.4-387  FIXED MOBILE 641 C5  387-390  FIXED MOBILE Mobile-Satellite (space-to-Earth) 641 641A  C5  390-399.9  FIXED MOBILE		501 592 641 642 C5 C8
### STATE	273-312	
FIXED MOBILE  MOBILE  MOBILE (Earth-to-space) 641 641A  C5 C8  315-328.6  FIXED MOBILE  641 C5 C8  328.6-335.4  AERONAUTICAL RADIONAVIGATION 645  335.4-387  FIXED MOBILE  641 C5  387-390  FIXED MOBILE		641 C5 C8
315-328.6  FIXED  MOBILE  641 C5 C8  328.6-335.4  AERONAUTICAL RADIONAVIGATION  645  335.4-387  FIXED  MOBILE  641 C5  387-390  FIXED  MOBILE  Mobile-Satellite (space-to-Earth) 641 641A  C5  390-399.9  FIXED  MOBILE	312-315	FIXED MOBILE
FIXED MOBILE  641 C5 C8  328.6-335.4  AERONAUTICAL RADIONAVIGATION 645  335.4-387  FIXED MOBILE 641 C5  387-390  FIXED MOBILE Mobile-Satellite (space-to-Earth) 641 641A C5  390-399.9  FIXED MOBILE	t t	C5 C8
328.6-335.4  AERONAUTICAL RADIONAVIGATION 645  335.4-387  FIXED MOBILE 641 C5  387-390  FIXED MOBILE Mobile-Satellite (space-to-Earth) 641 641A C5  390-399.9  FIXED MOBILE MOBILE	315-328.6	
328.6-335.4  AERONAUTICAL RADIONAVIGATION 645  335.4-387  FIXED MOBILE 641 C5  387-390  FIXED MOBILE Mobile-Satellite (space-to-Earth) 641 641A C5  390-399.9  FIXED MOBILE MOBILE		•
AERONAUTICAL RADIONAVIGATION 645  335.4-387  FIXED MOBILE 641 C5  387-390  FIXED MOBILE Mobile-Satellite (space-to-Earth) 641 641A C5  390-399.9  FIXED MOBILE MOBILE		641 C5 C8
335.4-387  FIXED MOBILE  641 C5  387-390  FIXED MOBILE Mobile-Satellite (space-to-Earth) 641 641A  C5  390-399.9  FIXED MOBILE MOBILE	328.6-335.4	AEROŅAUTICAL RADIONAVIGATION
FIXED MOBILE  641 C5  387-390  FIXED MOBILE Mobile-Satellite (space-to-Earth) 641 641A  C5  390-399.9  FIXED MOBILE MOBILE	-	645
387-390  FIXED  MOBILE  Mobile-Satellite (space-to-Earth) 641 641A  C5  390-399.9  FIXED  MOBILE	335.4-387	
FIXED MOBILE MOBILE Mobile-Satellite (space-to-Earth) 641 641A C5 390-399.9 FIXED MOBILE		641 C5
390-399.9 FIXED MOBILE	387-390	MOBILE
FIXED MOBILE	<u>.</u>	C5
641 C5	390-399.9	
		641 C5

MHz
ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3
235-267	FIXED MOBILE	
	501 592 635 640 641 64	2
267-272	FIXED MOBILE Space Operation (space-to-Earl	
	641 643	
272-273	SPACE OPERATION (space-to- FIXED MOBILE	Earth)
	641	
273-312	FIXED MOBILE	
	641	
312-315	FIXED MOBILE Mobile-Satellite (Earth-to-space	) 641 641A
315-322		·
5.0 0.2	FIXED MDBILE	
	641	
322-328.6	FIXED MOBILE RADIO ASTRONOMY	
•	644	
328.6-335.4	AERONAUTICAL RADIONAVIG	ATION
	645 645A	
335.4-387	FIXEO MOBILE	
	641	
387-390	FIXED MOBILE Mobile-Satellite (space-to-Earth)	641 641A
390-399.9	FIXED MOBILE	
•	641	

399.9-400.05	RADIONAVIGATION-SATELLITE
	609 645B C19
400.05-400.15	STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz)
	646
400.15-401	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) 647A MOBILE-SATELLITE (space-to-Earth) 599B Space Operation (space-to-Earth)
	647B
401-402	METEOROLOGICAL AIDS SPACE OPERATION (space-to-Earth) Earth Exploration-Satellite (Earth-to-space) Fixed Mobile except aeronautical mobile
402-403	METEDROLOGICAL AIDS Earth Exploration-Satellite (Earth-to-space) Fixed Mobile except aeronautical mobile
403-406	METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile
406-406.1	648
700-700.1	MOBILE-SATELLITE (Earth-to-space) 649 649A
	043 043A
406.1-410	RADIO ASTRONOMY MOBILE except aeronautical mobile Fixed
	648 650

MHz ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3
399.9-400.05		
	RADIONAVIGATION-SATELLITE	
	609 645B	
400.05-400.15	STANDARD FREQUENCY AN (400.1 MHz)	D TIME SIGNAL-SATELLITE
	646 647	
400.15-401	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) 647A MOBILE-SATELLITE (space-to-Earth) 599B Space Operation (space-to-Earth)	
	647 647B	
401-402	METEOROLOGICAL AIDS SPACE OPERATION (space-to Earth Exploration-Satellite (Ear Fixed Meteorological-Satellite (Earth Mobile except aeronautical mo	rth-to-space) -to-space)
402-403	METEOROLOGICAL AIDS Earth Exploration-Satellite (Ear Fixed Meteorological-Satellite (Earth Mobile except aeronautical me	-to-space)
403-406	METEOROLOGICAL AIDS Fixed Mobile except aeronautical mo	obile
	648	
406-406.1	MOBILE-SATELLITE (Earth-to	-space)
	649 649A	
406.1-410	FIXED MDBILE except aeronautical n RADIO ASTRDNDMY	nobile
	648 650	

410-41'4	MOBILE except aeronautical mobile Fixed Space Research (space-to-space) 651A	
414-415	FIXED  Mobile except aeronautical mobile  Space Research (space-to-space) 651A	
415-419	MOBILE except aeronautical mobile Fixed Space Research (space-to-space) 651A	
419-420	FIXEO Mobile except aeronautical mobile Space Research (space-to-space) 651A	
420-430	MOBILE except aeronautical mobile Fixed	
	C10 .	
430-450	RADIOLOCATION 667 Amateur 666	
450-470	MOBILE 669 670 Fixed	2
	668	

MHz ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3
410-420	FIXED MOBILE except aeronautical mobile Space Research (space-to-space) 651A	
·		
		·
420-430	FIXED MOBILE except aeronautical m Radiolocation	nobile
	651 652 653	
430-440 AMATEUR RADIOLOCATION	430-440 RADIOLOCATION Amateur	. `
653 654 655 656 657 658 659 661 662 663 664 665	653 658 659 660 660A 6	563 664
440-450		
	FIXED MOBILE except aeronautical m Radiolocation	obile
	651 652 653 666 667 66	
450-460	00. 002 000 007 00	
	FIXED . MOBILE	
	653 668 669 670	
460-470	FIXED MOBILE Meteorological-Satellite (space	-to-Earth)
	669 670 671 672	

470-608	
	BROADCASTING
,	•
608-614	
	RADIO ASTRONOMY Mobile-Satellite except aeronautical mobile-satellite
	(Earth-to-space)
1	
614-806	BROADCASTING
	BROADCASTING
	•
806-890	MOBILE
	Fixed
	_
	700 700A C11

MHz
ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3
470-790 BROADCASTING	470-512 BROADCASTING Fixed Mobile 674 675 512-608 BROADCASTING	470-585 FIXED MOBILE BROADCASTING 673 677 679 585-610 FIXED MOBILE BROADCASTING RADIONAVIGATION
	678 608-614	688 689 690
	RADIO ASTRONOMY Mobile-Satellite except aeronautical mobile-satellite (Earth-to-space)	610-890 FIXED MOBILE BROADCASTING
676 677A 683 684 685 686 686A 687 689 693 694		
790-862 FIXED BROADCASTING	614-806 BROADCASTING Fixed Mobile	
	675 692 692A 693	
694 695 695A 696 697 700B 702	806-890 FIXED MOBILE BROADCASTING	
862-890 FIXED MDBILE except aeronautical mobile BROADCASTING 703		
700B 704	692A 700 700A	677 688 689 690 691 693 701

MOBILE except aeronautical mobile Radiologation C5A

FIXED MOBILE except aeronautical mobile Radiolocation C5A

MOBILE except aeronautical mobile

FIXED MOBILE except aeronautical mobile Radiolocation C5A

FIXED Mobile except aeronautical mobile Radiolocation C5A

MOBILE except aeronautical mobile

FIXED MOBILE except aeronautical mobile Radiolocation C5A

FIXED Mobile except aeronautical mobile Radiolocation C5A

Fixed Radiolocation C5A

Fixed Radiolocation C5A

FIXED

707

700A 704A

FIXED RADIOLOCATION C5A Amateur Mobile except aeronautical mobile

890-902

902-928

928-929

929-932

932-932.5

932.5-935

935-941

941-941.5

941.5-942

# MHz ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3
RESION F 890-942 FIXED MOBILE except aeronautical mobile BROADCASTING 703 Radiolocation	890-902 FIXED MOBILE except aeronautical mobile Radiolocation	890-942 FIXED MOBILE BROADCASTING Radiolocation
nauolocation	700A 704A 705	
	902-928 FIXED Amateur Mobile except aeronautical mobile Radiolocation	
	928-942	
	FIXED MOBILE except aeronautical mobile Radiolocation	
·		
704	705	706 ·

CANADIAN ALLOCATION TABLE

	W 1 . WWW.
942-944	FIXED Mobile
944-948.5	MOBILE Fixed
948.5-952	MOBILE Fixed
952-956	FIXED MOBILE
956-960	FIXED Mobile
960-1 215	AERONAUTICAL RADIONAVIGATION
	709
1 215-1 240	RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth)
	713
1 240-1 300	RADIOLOCATION AERONAUTICAL RADIONAVIGATION Amateur
	,
	664 713 ·
1 300-1 350	AERONAUTICAL RADIONAVIGATION 717 Radiolocation
	·
Ľ	718

ITU ALLOCATION TO SERVICES

PEGION 1	PEGION 2	BEGION 3
REGION 1  942-960 FIXED MOBILE except aeronautical mobile BROADCASTING 703	REGION 2 942-960 FIXED MOBILE	REGION 3  942-960 FIXED MOBILE BROADCASTING
704	,	701
960-1 215	AERONAUTICAL RADIONAVIGATION	
1 215-1 240	709  RADIOLOCÀTION RADIONAVIGATION-SATELLITE (space-to-Earth)	
	710 711 712 712A 713	
1 240-1 260	RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) 710 Amateur	
	711 712 712A 713 714	
1 260-1 300	RADIOLOCATION Amateur	
	664 711 712 712A 713 714	
1 300-1 350	AERONAUTICAL RADIDNAVI Radiolocation	
	715 716 718	

1 350- 1 370	RADIOLDCATION AERONAUTICAL RADIONAVIGATION 714 FIXED C5 MOBILE C5	
	718	
1 370-1 400	FIXED C5 MOBILE C5 RADIOLOCATION	
	718 720 C27	
1 400-1 427	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	
	721 722	
1 427-1 429	SPACE OPERATION {Earth-to-space} FIXEO	
	722	
1 429-1 452	FIXEO MOBILE C34	
	722	
<b>1</b> 452-1 492	BROADCASTING 722A BROADCASTING-SATELLITE 722A FIXED Mobile	
	722 C2B C29 C30	ļ
1 492-1 515	FIXED MOBILE C 34	
•	722	
1 515-1 525	FIXED C31 MOBILE C34 MOBILE-SATELLITE (space-to-Earth) C32	
	` 722 723C	

ITU ALLOCATION TO SERVICES

REGION 1	REGION 2 .	REGION 3
1 350-1 400 FIXED MOBILE RADIDLOCATION	1 350-1 400 RADIOLOCATION	
718 719 720 1 400-1 427	714 718 720	
1 400-1 427	EARTH EXPLORATION-SATE RADIO ASTRONOMY SPACE RESEARCH (passive)	-
	721 722	
1 427-1 429	SPACE OPERATION (Earth-to FIXED MOBILE except aeronautical of	•
	722	
1 429-1 452 FIXED MOBILE except aeronautical mobile	1 429-1 452 FIXED MOBILE 723	
722 723B	722	
1 452-1 492 FIXED MOBILE except aeronautical mobile BROADCASTING SATELITE 722A 722B BROADCASTING 722A 722B	1 452-1 492 FIXED MOBILE 723 BROADCASTING-SATELLITE BROADCASTING 722A 72:	
722 723B	722 722C	
1 492-1 525 FIXED MOBILE except aeronautical mobile	1 492-1 525 FIXED MOBILE 723 MOBILE-SATELLITE (space-to-Earth)	1 492-1 525 FIXED MOBILE 723
722 723B	722 722C 723C	722

1 525-1 530	MOBILE-SATELLITE (space-to-Earth) Space Operation (space-to-Earth) Earth Exploration-Satellite
L	722 726A 726D
1 530-1 535	MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite
٥	
·	722 726A 726C 726D
1 535-1 544	MOBILE-SATELLITE (space-to-Earth)
	722 726A 726C 726D
1 544-1 545	MOBILE-SATELLITE (space-to-Earth)
	722 726D 727A
1 545-1 555	AERONAUTICAL MOBILE-SATELLITE (R) (space-to-Earth) Mobile-Satellite (space-to-Earth)
	722 726A 726D 729 729A

### ITU ALLOCATION TO SERVICES

TITO ALLOCATION TO SERVICES			
REGION 1	REGION 2	REGION 3	
1 525-1 530 SPACE OPERATION (space-to-Earth) FIXED MARITIME MOBILE-SATELLITE (space-to-Earth) Land Mobile-Satellite (space-to-Earth) 726B Earth Exploration-Satellite Mobile except aeronautical mobile 724	1 525-1 530 SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Earth Exploration- Satellite Fixed Mobile 723	1 525-1 530 SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) FIXED Earth Exploration- Satellite Mobile 723 724	
722 723B 725 726A 726D	722 723A 726A 726D	722 726A 726D	
1 530-1 533 SPACE OPERATION (space-to-Earth) MARITIME MOBILE- SATELLITE (space-to-Earth) LAND MDBILE- SATELLITE (space-to-Earth) Earth Exploration- Satellite Fixed Mobile except aeronautical mobile	1 530-1 533 SPACE OPERATION (space-to-Earth) MARITIME MDBILE-SATELLITE (space-to-Earth) LAND MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Fixed Mobile 723		
722 723B 726A 726D	722 726A 726C 726D		
1 533-1 535 SPACE DPERATION (space-to-Earth) MARITIME MOBILE- SATELLITE (space-to-Earth) Earth Exploration- Satellite Fixed Mobile except aeronautical mobile Land Mobile-Satellite (space-to-Earth) 726B	1 533-1 535 SPACE OPERATION (space-to-Earth) MARITIME MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite Fixed Mobile 723 Land Mobile-Satellite (space-to-Earth) 726B		
722 723B 726A 726D	722 726A 726C 726D		
1 535-1 544	MARITIME MOBILE-SATELLITE (space-to-Earth) Land Mobile-Satellite (space-to-Earth) 726B		
1 544-1 545	722 726A 726C 726D 72	/	
	MOBILE-SATELLITE (space-to-Earth)		
	722 726D 727 727A		
1 545-1 555	AERDNAUTICAL MOBILE-SATELLITE (R) (space-to-Earth)		
	722 726A 726D 727 729	729A 730	

CANADIAN ALLDCATION TABLE

1 555-1 559 `	MOBILE-SATELLITE (space-to-Earth)
1 559-1 610	722 726A 726D 729 730B  AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth)
1 610-1 610.6	722 AERONAUTICAL RADIDNAVIGATIDN
ż	MOBILE-SATELLITE (Earth-to-space) C48
	722 731E 732 733 733A 733E
1 610.6-1 613.8	AERONAUTICAL RADIDNAVIGATION MOBILE-SATELLITE (Earth-to-space) C48 RADIDASTRONOMY
1 613.8-1 626.5	722 731E 732 733 733A 733E 734  AERONAUTICAL RADIDNAVIGATION MDBILE-SATELLITE (Earth-to-space) C48 Mobile-Satellite (space-to-Earth)
	722 731E 732 733 733A 733E

ITU ALLOCATION TO SERVICES

REGION 1	REGIDN 2	REGION 3
1 555-1 559	LAND MDBILE-SATELLITE (space-to-Earth)	
	722 726A 726D 727 730	730A 730B 730C
1 559-1 610	AERDNAUTICAL RADIDNAVI RADIONAVIGATION-SATELLI	
	722 727 730 731 731A	
1 610-1 610.6 AERDNAUTICAL RADIDNAVIGATIDN MOBILE-SATELLITE (Earth-to-space)	1 610-1 610.6 AERDNAUTICAL RADIDNAVIGATION RADIODETERMINATIDN- SATELLITE (Earth-to-space) MDBILE-SATELLITE (Earth-to-space)	1 610-1 610.6 AERDNAUTICAL RADIONAVIGATIDN MOBILE-SATELLITE (Earth-to-space) Radiodetermination- Satellite (Earth-to-space)
722 727 730 731 731E 732 733 733A 733B 733E 733F	722 731E 732 733 733A 733C 733D 733E	722 727 730 731E 732 733 733A 733B 733E
1 610.6-1 613.8 AERONAUTICAL RADIONAVIGATIDN MDBILE-SATELLITE (Earth-to-space) RADID ASTRONDMY	1 610.6-1 613.B AERONAUTICAL RADIONAVIGATION RADIODETERMINATION- SATELLITE (Earth-to-space) MDBILE-SATELLITE (Earth-to-space) RADIO ASTRONOMY	1 610.6-1 613.8 AERONAUTICAL RADIONAVIGATION MOBILE-SATELLITE (Earth-to-space) RADIO ASTRDNDMY Radiodetermination- Satellite (Earth-to-space)
722 727 730 731 731E 732 733 733A 733B 733E 733F 734	722 731E 732 733 733A 733C 733D 733E 734	722 727 730 731E 732 733 733A 733B 733E 734
1 613.8-1 626.5 AERONAUTICAL RADIDNAVIGATIDN MOBILE-SATELLITE (Earth-to-space) Mobile-Satellite (space-to-Earth)	1 613.8-1 626.5 AERONAUTICAL RADIDNAVIGATION RADIODETERMINATION- SATELLITE (Earth-to-space) MDBILE-SATELLITE (Earth-to-space) Mobile-Satellite (space-to-Earth)	1 613.8-1 626.5 AERDNAUTICAL RADIONAVIGATIDN MOBILE-SATELLITE (Earth-to-space) Radiodetermination- Satellite (Earth-to-space) Mobile-Satellite (space-to-Earth)
722 727 730 731 731E 731F 732 733 733A 733B 733E 733F	722 731E 731F 732 733 733A 733C 733D 733E	722 727 730 731E 731F 732 733 733A 733B 733E

CANADIAN ALLOCATION TABLE

1 626.5-1 645.5 MOBILE-SATELLITE (Earth-to-space)	
·	
722 726A 726C 726D	
MDBILE-SATELLITE (Earth-to-space)	
722 726D 734B	
1 646.5-1 656.5  AERONAUTICAL MOBILE-SATELLITE (R)	
(Earth-to-space)  Mobile-Satellite (Earth-to-space)	
722 726A 726D 729A 735	
1 656.5-1 660	
MDBILE-SATELLITE (Earth-to-space)	
722 726A 726D 730B 735	
1 660-1 660.5	
MOBILE-SATELLITE (Earth-to-space) RADID ASTRDNOMY	
	•
722 726A 726D 730B 735 736	
1 660.5-1 668.4 RADIO ASTRDNOMY	
SPACE RESEARCH (passive) Fixed	
722 736 739	
1 668.4-1 670	
METEOROLOGICAL AIDS FIXED	
RADIO ASTRONOMY	
722 736	

ITU ALLDCATION TO SERVICES

REGION 1	REGION 2	REGION 3
1 626.5-1 631.5 MARITIME MOBILE- SATELLITE (Earth-to-space) Land Mobile-Satellite (Earth-to-space) 726B	1 626.5-1 631.5 MOBILE-SATELLITE (Earth-to-s <sub>i</sub>	pace)
722 726A 726D 727 730	722 726A 726C 726D 727	730
1 631.5-1 634.5	MARITIME MOBILE-SATELLITE LAND MOBILE-SATELLITE (Earl	
	722 726A 726C 726D 727	730 734A
1 634.5-1 645.5	MARITIME MOBILE-SATELLITE Land Mobile-Satellite (Earth-to-s	
	722 726A 726C 726D 727	730
1 645.5-1 646.5	MDBILE-SATELLITE (Earth-to-sp	pace)
	722 726D 734B	
1 646.5-1 656.5	AERONAUTICAL MOBILE-SATE (Earth-to-space)	ELLITE (R)
	722 726A 726D 727 729A	730 735
1 656.5-1 660	LAND MOBILE-SATELLITE (Earl	h-to-space)
	722 726A 726D 727 730	730A 730B 730C 734A
1 660-1 660.5	RADIO ASTRONOMY LAND MOBILE-SATELLITE (Eart	h-to-space)
	722 726A 726D 730A 730I	B 730C 736
1 660.5-1 668.4	RADID ASTRDNOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mob	iile .
	722 736 737 738 739	
1 668.4-1 670	METEDROLOGICAL AIDS FIXED MDBILE except aeronautical mo RADIO ASTRONOMY	bile ·
	722 736	

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1 670-1 <b>6</b> 75	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth)
	722 C33
1 675-1 700	METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (Earth-to-space) C32
·	
1 700-1 710	FIXED METEOROLOGICAL-SATELLITE (space-to-Earth)
	671 722
1 710-1 850	FIXED . Mobile C5
	722 744 745 C33
1 850-1 970	FIXED MOBILE
	746A C35

ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3
1 670-1 675	METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLII MOBILE 740A	· · · · · · · · · · · · · · · · · · ·
1 675-1 690 METEOROLOGICAL AIDS FIXED METEOROLOGICAL- SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	METEOROLOGICAL AIDS FIXED METEOROLOGICAL SATELLITE (Space-to-Earth) MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space)	1 675-1 690 METEOROLOGICAL AIDS FIXED METEOROLOGICAL- SATELLITE (space-to-Earth) MOBILE except aeronautical mobile
722	722 735A	722
1 690-1 700 METEOROLOGICAL AIDS METEOROLOGICAL- SATELLITE (space-to-Earth) Fixed Mobile except aeronautical mobile	1 690-1 700 METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE (space-to-Earth) MOBILE-SATELLITE (Earth-to-space)	1 690-1 700 METEOROLOGICAL AIDS METEOROLOGICAL- SATELLITE (space-to-Earth)
671 722 741	671 722 735A 740	671 722 740 742
1 700-1 710 FIXED METEOROLOGICAL SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	1 700-1 710 FIXED METEOROLOGICAL- SATELLITE (space-to-Earth) MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space)	1 700-1 710 FIXED METEOROLOGICAL- SATELLITE (space-to-Earth) MOBILE except aeronautical mobile
671 722	671 722 735A	671 722 743 ·
1 710-1 930	FIXED MOBILE 740A 722 744 745 746 746A	
1 930-1 970 FIXED MOBILE	1 930-1 970 FIXED . MOBILE Mobile-Satellite (Earth-to-space)	1 930-1 970 FIXED MOBILE
746A	746A	746A

MH

1 970-2 010	FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) C48
	746A 746B C35 C35A C36
2 010-2 025	FIXED MOBILE C34
	746A
2 025-2 110	FIXED SPACE RESEARCH (Earth-to-space) (space-to-space) SPACE OPERATION (Earth-to-space) (space-to-space) EARTH EXPLORATION-SATELLITE (Earth-to-space) (space-to-space)
	Mobile C5
	750A
2 110-2 120	FIXED MOBILE SPACE RESEARCH (deep space) (Earth-to-space)
	746A C35A
2 120-2 160	FIXED MOBILE
	746A C35A
2 160-2 200	FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) C48
	746A 746B C35A C36

ITU ALLOCATION TO SERVICES

	• .	
REGION 1	REGION 2	REGION 3
1 970-1 980 FIXED MOBILE	1 970-1 980 FIXED MOBILE MOBILE-SATELLITE (Earth-to-space)	1 970-1 980 FIXED MOBILE
746A	746A 746B 746C	746A
1 980-2 010	FIXED MOBILE MOBILE-SATELLITE (Earth-to-space) 746A 746B 746C	
2 010-2 025	FIXED MOBILE 746A	
2 025-2 110	FIXED MOBILE 747A SPACE RESEARCH (Earth-to-space) (space-to-space) SPACE OPERATION (Earth-to-space) (space-to-space) EARTH EXPLORATION-SATELLITE (Earth-to-space) (space-to-space)	
2 110-2 120	FIXED MOBILE SPACE RESEARCH (deep space) (Earth-to-space)	
2 120-2 160 FIXED MOBILE	746A  2 120-2 160 FIXED MOBILE Mobile-Satellite (space-to-Earth)	2 120-2 160 FIXED MOBILE
746A 2 160-2 170 FIXEO MOBILE	746A  2 160-2 170 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth)	746A 2 160-2 170 FIXED MOBILE
746A 2 170-2 200	746A 746B 746C  FIXED  MOBILE  MOBILE-SATELLITE (space-to	746A Earth)
	746A 746B 746C	

2 200-2 290	FIXED SPACE RESEARCH (space-to-Earth) (space-to-space) SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space) Mobile C5
	750A
2 290-2 300	FIXED . SPACE RESEARCH (deep space) (space-to-Earth) Mobile C5
2 300-2 450	FIXED MOBILE 751 RADIOLOCATION Amateur
	664 752 C37
2 450-2 483.5	FIXED RADIOLOCATION
	752 C37
2 483.5-2 500	FIXED C38 RADIODETERMINATION-SATELLITE (space-to-Earth) 753A RADIOLOCATION MOBILE-SATELLITE (space-to-Earth) C48
	752 753F C37

ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3
2 200-2 290	, REGION 2	REGION 3
	FIXED SPACE RESEARCH (space-to-Earth) (space-to-space) SPACE OPERATION (space-to-Earth) (space-to-space) EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space) MOBILE 747A	
	750A	•
2 290-2 300		•
4	FIXED MOBILE except aeronautical n SPACE RESEARCH (deep space	
2 300-2 450 FIXED MOBILE Amateur Radiolocation	2 300-2 450 FIXED MOBILE RADIOLOCATION Ameteur	
664 751A 752	664 750B 751 751B 752	
2 450-2 483.5 FIXED MOBILE Radiolocation	2 450-2 483.5 FIXED MOBILE RADIOLOCATION	
752 753	751 752	
2 483.5-2 500 FIXED MOBILE MOBILE-SATELLITE (space-to-Earth) Radiolocation	2 483.5-2 500 FIXED MOBILE RADIODETERMINATION- SATELLITE (space-to-Earth) 753A RADIOLOCATION MOBILE-SATELLITE (space-to-Earth)	2 483.5-2 500 FIXED MOBILE RADIOLOCATION MOBILE-SATELLITE (space-to-Earth) Radiodetermination- satallita (spaca-to-Earth) 753A
733F 752 753 753A 753B 753C 753F	752 753D 753F	752 753C 753F

MHz

2 500-2 596	FIXED 762 764 Mobile C5
	720 C39
2 596-2 655	BROADCASTING Mobile C5
N	720
2 655-2 686	BROADCASTING Earth Exploration-Satellite (passive) Space Research (passive) Radio Astronomy Mobile C5
	•
	765 C39
2 686-2 690	FIXED 762 764 Earth Exploration-Satellite (passive) Radio Astronomy Space Research (passive)
	·
II .	765 C39

ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3
2 500-2 520 FIXED 762 763 764 MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth)	2 500-2 520 FIXED 762 764 FIXED-SATELLITE (space-to-Earth) 761 MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth)	
754 754B 755A 756 759 760A	754 754A 755 755A 760A	
2 520-2 655 FIXED 762 763 764 MOBILE except aeronautical mobile BROADCASTING- SATELLITE 757 760	2 520-2 655 FIXED 762 764 FIXED-SATELLITE (space-to-Earth) 761 MOBILE except aeronautical mobile BROADCASTING- SATELLITE 757 760	2 520-2 535 FIXED 762 764 FIXED-SATELLITE (space-to-Earth) 761 MOBILE except aeronautical mobile BROADCASTING- SATELLITE 757 760
		754
		2 535-2 655 FIXED 762 764 MOBILE except aeronautical mobile BROADCASTING- SATELLITE 757 760
720 754 754B 756 757A 758 759	720 754 755	720 757A
2 655-2 670 FIXED 762 763 764 MOBILE except aeronautical mobile BROADCASTING- SATELLITE 757 760 Earth Exploration- Satellite (passive) Radio Astronomy Space Research (passive)	2 655-2 670 FIXED 762 764 FIXED-SATELLITE (Earth-to-space) (space-to-Earth) 761 MOBILE except aeronautical mobile BROADCASTING SATELLITE 757 760 Earth Exploration Satellite (passive) Radio Astronomy Space Research (passive)	2 655-2 670 FIXED 762 764 FIXED-SATELLITE (Earth-to-space) 761 MOBILE except aeronautical mobile BROADCASTING- SATELLITE 757 760 Earth Exploration- Satellite (passive) Radio Astronomy Space Research (passive)
758 759 765 766	765 766	765 766
2 670-2 690 FIXED 762 763 764 MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space) Earth Exploration- Satellite (passive) Radio Astronomy Space Research (passive)	2 670-2 690 FIXED 762 764 FIXED-SATELUTE (Earth-to-space) (space-to-Earth) 761 MDBILE except aeronautical mobile MOBILE-SATELUTE (Earth-to-space) Earth Exploration- Satellite (passive) Radio Astronomy Space Research (passive)	2 670-2 690 FIXED 762 764 FIXED-SATELLITE [Earth-to-space] 761 MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space) Earth Exploration- Satellite (nassive) Radio Astronomy Space Research (passive)
764A 765 766	764A 765 766	764A 765 766

MHz
CANADIAN ALLOCATION TABLE

5 000-5 250	AERONAUTICAL RADIONAVIGATION
,	733 796 797
5 250-5 255	RADIOLOCATION Space Research
	713
5 255-5 350	RADIOLOCATION
	713
5 350-5 460	AERONAUTICAL RADIONAVIGATION 799 Radiolocation
5 460-5 470	RADIONAVIGATION 799 Radiolocation
5 470-5 650	MARITIME RADIONAVIGATION Radiolocation
-	802
5 650-5 725	RADIOLOCATION Amateur Space Research (deep space)
	664
5 725-5 850	RADIOLOCATION Amateur
E 050 E 005	806 808
5 850-5 925	FIXED FIXED-SATELLITE (Earth-to-space) Amateur Radiolocation
	806
5 925-7 075	FIXED FIXED-SATELLITE (Earth-to-space) 792A C40
	791 809

. MHz

REGION 1	REGION 2	REGION 3	
5 000-5 250	AERONAUTICAL RADIONAVIGATION		
•	733 796 797 797A 79	7B	
5 250-5 255	RADIOLOCATION Space Research		
	713 798		
5 255-5 350	RADIOLOCATION	RADIOLOCATION	
	713 798		
5 350-5 460	AERONAUTICAL RADIONA Radiolocation	AERONAUTICAL RADIONAVIGATION 799 Radiolocation	
5 460-5 470	RADIONAVIGATION 799 Radiolocation		
5 470-5 650			
`	MARITIME RADIONAVIGA Radiolocation	MARITIME RADIONAVIGATION Radiolocation	
	800 801 802		
5 650-5 725	RADIOLDCATION Amateur Space Research (deep space)		
	664 801 803 804 805		
5 725-5 850 FIXED-SATELLITE (Earth-to-space) RADIOLOCATION Amateur	5 725-5 850 RADIOLOCATION Amateur	5 725-5 850 RADIOLOCATION	
801 8D3 805 806 807 808	803 805 806 808	803 805 806 808	
5 850-5 925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE	5 850-5 925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Amateur Radiolocation	5 850-5 925 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Radiolocation	
806	806	806	
5 925-7 075	FIXED FIXED-SATELLITE (Earth-to MOBILE	-space) 792A	
	701 800		
	791 809		

MHz
CANADIAN ALLOCATION TABLE

7 075-7 250	FIXED
	809 810 811
7 250-7 300	FIXED-SATELLITE (space-to-Earth) C49 MOBILE-SATELLITE 812 C50
7 300-7 450	FIXED FIXED-SATELLITE (space-to-Earth) C49
	812
7 450-7 550	FIXED FIXED-SATELLITE (space-to-Earth) C49 METEOROLOGICAL-SATELLITE (space-to-Earth)
7 550-7 750	FIXED FIXED-SATELLITE (space-to-Earth) C49
7 750-7 900	FIXED
7 900-7 975	FIXED FIXED-SATELLITE (Earth-to-space) C49 ,
	812
7 975-8 025	FIXED-SATELLITE (Earth-to-space) C49 MOBILE-SATELLITE 812 C50
8 025-8 175	EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) C49
	814

ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3	
7 075-7 250	FIXED MOBILE		
	809 810 811		
	803 810 811	803 810 811	
7 250-7 300	FIXED FIXED-SATELLITE (space-ti MOBILE	FIXED-SATELLITE (space-to-Earth)	
	812	812	
7 300-7 450		FIXED FIXED-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	
	812	812	
7 450-7 550	METEOROLOGICAL-SATEL	FIXED FIXED-SATELLITE (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	
7 550-7 750		FIXED FIXEO-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile	
7 750-7 900	FIXED MOBILE except aeronautica	FIXED . MOBILE except aeronautical mobile	
7 900-7 975	•		
7 900-7 975	FIXED FIXED-SATELLITE (Earth-to MOBILE	FIXED-SATELLITE (Earth-to-space)	
	812		
7 975-8 025	FIXED FIXED-SATELLITE (Earth-to MOBILE	FIXED FIXED-SATELLITE (Earth-to-space)	
	· 812		
8 025-8 175 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Earth Exploration- Satellite (space-to-Earth)	8 025-8 175 EARTH EXPLORATION- SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 814	8 025-8 175 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Earth Exploration- Satellite (space-to-Earth)	
813 815		813 815	

MHz
CANADIAN ALLOCATION TABLE

8 175-8 215	EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) C49 METEOROLOGICAL-SATELLITE (Earth-to-space)
•	814
8 215-8 400	EARTH EXPLORATION-SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) C49
	814
8 400-8 500	FIXED SPACE RESEARCH (space-to-Earth) 816
8 500-8 750	RADIOLOCATION
8 750-8 850	713  RADIOLOCATION AERONAUTICAL RADIONAVIGATION 821
8 850-9 000	RADIOLOCATION MARITIME RADIONAVIGATION 823
9 000-9 200	AERONAUTICAL RADIONAVIGATION 717 Radiolocation
9 200-9 300	RADIOLOCATION MARITIME RADIONAVIGATION 823 824A
9 300-9 500	RADIONAVIGATION 825A Radiolocation
	775A 824A 825

ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3
8 175-8 215 FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL- SATELLITE (Earth-to-space) MOBILE Earth Exploration- Satellite (space-to-Earth) 813 815	8 175-8 215 EARTH EXPLORATION- (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) METEOROLOGICAL- SATELLITE (Earth-to-space) MOBILE 814	8 175-8 215 FIXED FIXED-SATELLITE (Earth-to-space) METEDRDLOGICAL- SATELLITE (Earth-to-space) MOSILE Earth Exploration- Satellite (space-to-Earth) 813 815
	0.045.0.400	· · · · · · · · · · · · · · · · · · ·
8 215-8 400 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Earth Exploration- Satellite (space-to-Earth)	8 215-8 400 EARTH EXPLORATION- SATELLITE (space-to-Earth) FIXED FIXED-SATELLITE (Earth-to-space) MOBILE 814	8 215-8 400 FIXED-SATELLITE (Earth-to-space) MOBILE Earth Exploration- Satellite (space-to-Earth)
813 815		813 815
8 400-8 500	FIXED MOBILE except aeronautical m SPACE RESEARCH (space-to 818	
8 500-8 750	RADIOLOCATION 713 819 820	
8 750-8 850	RADIOLOCATION AERONAUTICAL RADIONAVIGATION 821	
8 850-9 000	RADIOLOCATION MARITIME RADIONAVIGATION 823 824	
	AERONAUTICAL RADIDNAVIGATION 717 Radiolocation	
9 200-9 30D	BADIDI OCATION	
	RADIDLOCATION MARITIME RADIONAVIGATION 823	
	824 824A	
	RADIONAVIGATION 825A Radiolocation	
	775A 824A 825	

CANADIAN ALLDÇATION TABLE

10-10.45	RADIOLO CATION Amateur
	828
10.45-10.5	RADIOLOCATION Amateur Amateur-Satellite
10.5-10.55	FIXED RADIOLOCATION
10.55-10.6	FIXED
10.6-10.68	EARTH EXPLORATION-SATELLITE (passive) FIXED RADIO ASTRONOMY SPACE RESEARCH (passive)
	831 832
10.68-10.7	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)
	833
10.7-11.45	FIXED FIXED-SATELLITE (space-to-Earth) 792A
	C16
11,45-11.7	FIXED FIXED-SATELLITE (space-to-Earth) C41

ITU ALLOCATION TO SERVICES

		05010110
REGION 1	REGION 2	REGION 3
10-10.45 FIXED MOBILE RADIOLOCATION Amateur	10-10.45 RADIOLOCATION Amateur	10-10.45 FIXED MOBILE RADIOLOCATION Amateur
828	828 829	828
10.45-10.5	RADIOLD CATION Amateur Amateur-Satellite	
10.5-10.55 FIXED MOBILE Radiolocation	10.5-10.55 FIXED MOBILE RADIOLOCATION	
10.55-10.6	FIXED MOBILE except aeronautical mobile Radiolocation	
10.6-10.68	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY SPACE RESEARCH (passive) Radiolocation	
	831 832	
10.68-10.7	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	
	833 834	
10.7-11.7 FIXED FIXED-SATELLITE (Earth-to-space) (space-to-Earth)	10.7-11.7 FIXED FIXED-SATELLITE (space-to-Earth) 792A Mobile except aeronautical mobile	
792A 835 MOBILE except aeronautical mobile		

11.7-12.2	FIXED-SATELLITE (space-to-Earth)	
	C17	
12.2-12.7	FIXED BROADCASTING BROADCASTING-SATELLITE 839 B46 C43 C47	
	844	i
12.7-12.75	FIXED FIXED-SATELLITE (Earth-to-space)	_
12.75-13.25	FIXED FIXED-SATELLITE (Earth-to-space) 792A	
13.25-13.4	AERONAUTICAL RADIONAVIGATION 851	
•	852	İ
13.4-13.75	RADIOLOCATION Standard Frequency and Time Signal-Satellite (Earth-to-space) Space Research	
	713	j
13.75-14	RADIOLOCATION FIXED-SATELLITE (Earth-to-space) Standard Frequency and Time Signal-Satellite (Earth-to-space)	
	713 855A 855B C41	

ITU ALLOCATION TO SERVICES

REGION 1	REGION 2	REGION 3
11.7-12.5 FIXED BRDADCASTING BROADCASTING- SATELLITE Mobile except aeronautical mobile	11.7-12.1 FIXED 837 FIXED-SATELLITE (space-to-Earth) Mobile except aeronautical mobile 836 839  12.1-12.2 FIXED-SATELLITE (space-to-Earth)	11.7-12.2 FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING SATELLITE
	836 839 842	838
838	12.2-12.7 FIXED MOBILE except aeronautical mobile BROADCASTING BROADCASTING- SATELLITE	12.2-12.5 FIXED MOBILE except aeronautical mobile BROADCASTING
12.5-12.75	839 844 846	12.5-12.75 FIXED
FIXEO-SATELLITE (Earth-to-space) (space-to-Earth)	12.7-12.75 FIXED FIXED-SATELLITE (Earth-to-space) MOBILE except aeronuatical mobile	FIXED SATELLITE (space-to-Earth) MOBILE except aeronautical mobile BROADCASTING- SATELLITE 847
848 849 850		
12.75-13.25	FIXED FIXED-SATELLITE (Earth-to-s MOBILE Space Research (space-to-Ear	
13.25-13.4	AERONAUTICAL RADIONAVIGATON 851	
	852 853	
13.4-13.75	RADIOLOCATION Standard Frequency and Time Signal-Satellite (Earth-to-space) Space Research	
	713 853 854 855	
13.75-14	RADIOLOCATION FIXED-SATELLITE (Earth-to-sy Standard Frequency and Time (Earth-to-space) Space Research	
	713 853 854 855 855A	B55B

GHz CANADIAN ALLOCATION TABLE

15.7-16 <sub>-</sub> 6	RADIOLOCATION
	C42
16.6-17.1	RADIOLOCATION Space Research (Earth-to-space) (deep space)
17.1-17.2	RADIOLOCATION
17.2-17.3	RADIOLOCATION Earth Exploration-Satellite (active) Space Research (active)
17.3-17.7	FIXED-SATELLITE (Earth-to-space) 869 BROADCASTING-SATELLITE Radiolocation
	868A 869A C43 C44 C47
17.7-17.8	FIXED C45 FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 869 BROADCASTING-SATELLITE C46
	868A 869A C43 C44 C47
17.8-18.1	FIXED SATELLITE (space-to-Earth) (Earth-to-space) 869
	C43 C47 C48
18.1-18.4	FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 870A
	870 C43 C47 C48
18.4-18.6	FIXED FIXED-SATELLITE (space-to-Earth)
	C48

ITU ALLOCATION TO SERVICES

REGION 1	. REGION 2	REGION 3	
15.7-16.6	RADIOLOCATION		
	866 867	,	
16.6-17.1	RADIOLOCATION Space Research (Earth-to-spa 866 867	ice) (deep space)	
17,1-17,2	000 007		
	RADIOLOCATION		
	866 867		
17.2-17.3	RADIOLOCATION Earth Exploration-Satellite (ac Space Research (active)	itive) .	
•	866 867	T	
17.3-17.7 FIXED-SATELLITE (Earth-to-space) 869 Radiolocation	17.3-17.7 FIXED-SATELLITE (Earth-to-space) 869 BROADCASTING- SATELLITE Radiolocation	17.3-17.7 FIXED-SATELLITE (Earth-to-space) 869 Radiolocation	
868	868 868A 869A	868	
17.7-18.1 FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 869 MOBILE	17.7-17.8 FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 869 BROADCASTING- SATELLITE Mobile 869B 868A 869A	17.7-18.1 FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 869 MOBILE	
·	17.8-18.1 FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 869 MOBILE		
18.1-18.4	FIXED FIXED-SATELLITE (space-to-Earth) (Earth-to-space) 870A MOBILE		
	870 870B		
18.4-18.6	FIXED FIXED-SATELLITE (space-to-t MOBILE	Earth)	

### GHz CANADIAN ALLOCATION TABLE

18.6-18.8	EARTH EXPLORATION-SATELLITE (passive)
	FIXED
	FIXED-SATELLITE (space-to-Earth) 872
	SPACE RESEARCH (passive)
	871 C48
18.8-19.7	· · · · · · · · · · · · · · · · · · ·
10.0 .5.7	FIXED
	FIXED-SATELLITE (space-to-Earth)
	•
	C48
.19.7-20.2	
	FIXED-SATELLITE (space-to-Earth)
	MOBILE-SATELLITE (space-to-Earth)
	0704 0700 0700 0700 0700
	873A 873B 873C 873D 873E
20.2-21.2	EIVED CATELLITE ( +- E+-) RAG
	FIXED-SATELLITE (space-to-Earth) C49 MOBILE-SATELLITE (space-to-Earth) C50
	Standard Frequency and Time Signal-Satellite
	(space-to-Earth)
	(space-to-Earth)
21 2 21 4	(space-to-Earth)
21.2-21.4	
21.2-21.4	EARTH EXPLORATION-SATELLITE (passive) FIXED
21.2-21.4	EARTH EXPLORATION-SATELLITE (passive) FIXEO Mobile
21.2-21.4	EARTH EXPLORATION-SATELLITE (passive) FIXED
21.2-21.4	EARTH EXPLORATION-SATELLITE (passive) FIXEO Mobile
21.2-21.4	EARTH EXPLORATION-SATELLITE (passive) FIXEO Mobile
21.2-21.4	EARTH EXPLORATION-SATELLITE (passive) FIXEO Mobile
	EARTH EXPLORATION-SATELLITE (passive) FIXED Mobile SPACE RESEARCH (passive)
	EARTH EXPLORATION-SATELLITE (passive) FIXEO Mobile SPACE RESEARCH (passive)
	EARTH EXPLORATION-SATELLITE (passive) FIXED Mobile SPACE RESEARCH (passive)
	EARTH EXPLORATION-SATELLITE (passive) FIXED Mobile SPACE RESEARCH (passive)
	EARTH EXPLORATION-SATELLITE (passive) FIXED Mobile SPACE RESEARCH (passive)
	EARTH EXPLORATION-SATELLITE (passive) FIXED Mobile SPACE RESEARCH (passive)
21.4-22	EARTH EXPLORATION-SATELLITE (passive) FIXED Mobile SPACE RESEARCH (passive)  FIXED Mobile
21.4-22	EARTH EXPLORATION-SATELLITE (passive) FIXED Mobile SPACE RESEARCH (passive)  FIXED Mobile
21.4-22	EARTH EXPLORATION-SATELLITE (passive) FIXED Mobile SPACE RESEARCH (passive)  FIXED Mobile

GHz ITU ALLOCATION TO SERVICES

REGION 1		
	REGION 2	REGION 3
18.6-18.8 FIXED FIXED-SATELLITE (space-to-Earth) 872 MOBILE except aeronautical mobile Earth Exploration- Satellite (passive) Space Research (passive)	18.6-18.8 EARTH EXPLORATION- SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) 872 MOBILE except aeronautical mobile SPACE RESEARCH (passive)	18.6-18.8 FIXED FIXED-SATELLITE (space-to-Earth) 872 MOBILE except aeronautical mobile Earth Exploration - Satellite (passive) Space Research (passive)
871 .	871	871
18.8-19.7	FIXED SATELLITE (space-to-MOBILE	Earth)
19.7-20.1 FIXED-SATELLITE (space-to-Earth) Mobile-Satellite (space-to-Earth)	19.7-20.1 FIXED-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth)	19.7-20.1 FIXED-SATELLITE (space-to-Earth) Mobile-Satellite (space-to-Earth)
873	873 873A 873B 873C 873D 873E	873
20.1-20.2	FIXED-SATELLITE (space-to-E MOBILE-SATELLITE (space-to- 873 873A 873B 873C 873	-Earth)
	FIXED-SATELLITE (space-to-E MOBILE-SATELITE (space-to- Standard Frequency and Time (space-to-Earth)	Earth)
	010	
	EARTH EXPLORATION-SATEL FIXED MOBILE SPACE RESEARCH (passive)	LITE (passive)
FIXED	21.4-22 FIXED MDBILE	21.4-22 FIXED MOBILE BRDADCASTING- SATELLITE 873F 873G
22-22.21		
	FIXED MOBILE except aeronautical m	obile

# CANADIAN ALLOCATION TABLE

22.21-22.5	
LL.L1-L2.5	EARTH EXPLORATION-SATELLITE (passive).
	FIXED
	Mobile except aeronautical mobile RADIO ASTRONOMY
	SPACE RESEARCH (passive)
	875 876
22.5-22.55	
	FIXED Mobile
	Nobile
22.55-23.55	FIXED
	INTER-SATELLITE .
	Mobile
	879
23.55-23.6	FIXED
	Mobile
23.6-24	
	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY
	SPACE RESEARCH (passive)
	880
24-24.05	
	AMATEUR
	AMATEUR-SATELLITE
	881
24.05-24.25	
	RADIOLOCATION Amateur
	Earth Exploration-Satellite (active)
	881
24.25-24.45	
0 70	RADIONAVIGATION

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REGION 1	REGION 2	REGION 3	
22.21-22.5	FIXED MOBILE except aeronaution RADIO ASTRONOMY	MOBILE except aeronautical mobile	
	875_876		
22.5-22.55	FIXED MOBILE		
22.55-23.55	FIXED INTER-SATELLITE MOBILE	w	
	879	***************************************	
23.55-23.6	FIXED MOBILE		
23.6-24	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONDMY SPACE RESEARCH (passive)		
	880		
24-24.05	AMATEUR AMATEUR-SATELLITE		
	881		
24.05-24.25	RADIOLOCATION Amateur Earth Exploration-Satellite 881	Amateur Earth Exploration-Satellite (active)	
24.25-24.45 FIXED	24.25-24.45 RADIONAVIGATION	24.25-24.45 RADIONAVIGATION FIXED MOBILE	

# GHz CANADIAN ALLOCATION TABLE

24.45-24.65	RADIONAVIGATION INTER-SATELLITE 882E
24.65-24.75	INTER-SATELLITE RADIOLOCATION-SATELLITE (Earth-to-space)
24.75-25.25	FIXED-SATELLITE (Earth-to-space)
	882G C44 C47
25.25-27	FIXED MOBILE INTER-SATELLITE 881A Earth Exploration-Satellite (space-to-Earth) Standard Frequency and Time Signal-Satellite (Earth-to-space)
27-27.5	FIXED MOBILE FIXED-SATELLITE (Earth-to-space) C46 INTER-SATELLITE 881A
	881B
27.5-29.5	FIXED MOBILE FIXED-SATELLITE (Earth-to-space) C48
	882A 882B

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ITU ALLOCATION TO SERVICES

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REGION 1	REGION 2	REGION 3
24.45-24.65 FIXED INTER-SATELLITE	24.45-24.65 RADIONAVIGATION INTER-SATELLITE	24.45-24.65 RADIONAVIGATIDN FIXED INTER-SATELLITE MOBILE
	882E	882E
24.65-24.75 FIXED INTER-SATELLITE	24.65-24.75 INTER-SATELLITE RADIOLDCATION- SATELLITE (Earth-to-space)	24.65-24.75 FIXED INTER-SATELLITE MOBILE 88.2E 88.2F
24.75-25.25 FIXED	24.75-25.25 FIXED-SATELLITE (Earth-to-space) 882G	24.75-25.25 FIXED FIXED-SATELLITE (Earth-to-space) 882G MOBILE
	L.,	882F
25.25-25.5	FIXED MOBILE INTER-SATELLITE 881A Standard Frequency and Time (Earth-to-space)	· Signal-Satellite
25.5-27	FIXED MOBILE INTER-SATELLITE 881A Earth Exploration-Satellite (sp: Standard Frequency and Time (Earth-to-space)	
27-27.5 FIXED MOBILE INTER-SATELLITE 881A	27-27.5 FIXED FIXED-SATELLITE (Earth-to-s) MOBILE INTER-SATELLITE 881A 88	
27.5-28.5	FIXED FIXED-SATELLITE (Earth-to-sp MOSILE 882A 882B	nace) 882D
28.5-29.5	<del></del>	
	FIXED FIXED-SATELLITE (Earth-to-sp MOBILE Earth Exploration-Satellite (Ear	· ·
	882B	

### GHz CANADIAN ALLOCATION TABLE

FIXED-SATELLITE (Earth-to-space) 882D  873A 873B 873C 873E 882 882A 882B  30-31  FIXED-SATELLITE (Earth-to-space) C49  MOBILE-SATELLITE (Earth-to-space) C50  Standard Frequency and Time Signal-Satellite (space-to-Earth)  FIXED  MOBILE  Standard Frequency and Time Signal-Satellite (space-to-Earth)  Space Research 884  886  31.3-31.8  EARTH EXPLORATION-SATELLITE (passive)  RADIO ASTRONOMY  SPACE RESEARCH (passive)  887 888  31.8-32  RADIONAVIGATION  SPACE RESEARCH (deep space) (space-to-Earth)  893		
FIXED-SATELLITE (Earth-to-space) C49 MOBILE-SATELLITE (Earth-to-space) C50 Standard Frequency and Time Signal-Satellite (space-to-Earth)  FIXED MOBILE Standard Frequency and Time Signal-Satellite (space-to-Earth) Space Research 884 886  31.3-31.8  EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)  887 888  31.8-32  RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)	29.5-30	
FIXED-SATELLITE (Earth-to-space) C49 MOBILE-SATELLITE (Earth-to-space) C50 Standard Frequency and Time Signal-Satellite (space-to-Earth)  FIXED MOBILE Standard Frequency and Time Signal-Satellite (space-to-Earth) Space Research 884 886  31.3-31.8  EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)  887 888  31.8-32  RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)		
FIXED-SATELLITE (Earth-to-space) C49 MOBILE-SATELLITE (Earth-to-space) C50 Standard Frequency and Time Signal-Satellite (space-to-Earth)  FIXED MOBILE Standard Frequency and Time Signal-Satellite (space-to-Earth) Space Research 884 886  31.3-31.8  EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)  887 888  31.8-32  RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)		
FIXED-SATELLITE (Earth-to-space) C49 MOBILE-SATELLITE (Earth-to-space) C50 Standard Frequency and Time Signal-Satellite (space-to-Earth)  FIXED MOBILE Standard Frequency and Time Signal-Satellite (space-to-Earth) Space Research 884 886  31.3-31.8  EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)  887 888  31.8-32  RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)		
FIXED-SATELLITE (Earth-to-space) C49 MOBILE-SATELLITE (Earth-to-space) C50 Standard Frequency and Time Signal-Satellite (space-to-Earth)  31-31.3  FIXED MOBILE Standard Frequency and Time Signal-Satellite (space-to-Earth) Space Research 884 886  31.3-31.8  EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)  887 888  31.8-32  RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)		873A 873B 873C 873E 882 882A 882B
FIXED MOBILE Standard Frequency and Time Signal-Satellite (space-to-Earth) Space Research 884  886  31.3-31.8  EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)  887 888  31.8-32  RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)	30-31	MO8ILE-SATELLITE (Earth-to-space) C50 Standard Frequency and Time Signal-Satellite
FIXED MOBILE Standard Frequency and Time Signal-Satellite (space-to-Earth) Space Research 884  886  31.3-31.8  EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)  887 888  31.8-32  RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)	24 24 2	
31.3-31.8  EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)  887 888  31.8-32  RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)	31-31.3	MOBILE Standard Frequency and Time Signal-Satellite (space-to-Earth)
EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)  887 888  31.8-32  RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)		886
31.8-32  RADIONAVIGATION  SPACE RESEARCH (deep space) (space-to-Earth)	31.3-31.8	RADIO ASTRONOMY
31.8-32  RADIONAVIGATION  SPACE RESEARCH (deep space) (space-to-Earth)		
31.8-32  RADIONAVIGATION  SPACE RESEARCH (deep space) (space-to-Earth)		
31.8-32  RADIONAVIGATION  SPACE RESEARCH (deep space) (space-to-Earth)		Ŷ
31.8-32  RADIONAVIGATION  SPACE RESEARCH (deep space) (space-to-Earth)		
RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)		887 888
893	31.8-32	
		893

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REGION 1	REGION 2	REGION 3
29.5-29.9 FIXED-SATELLITE (Earth-to-space) 882D Mobile-Satellite (Earth-to-space) Earth Exploration-Satellite (Earth-to-space) 882C	29.5-29.9 FIXED-SATELLITE (Earth-to-space) 882D. MOBILE-SATELLITE (Earth-to-space) Earth Exploration-Satellite (Earth-to-space) 882C	29.5-29.9 FIXED-SATELLITE (Earth-to-space) 882D Mobile-Satellite (Earth-to-space) Earth Exploration-Satellite (Earth-to-space) 882C
882B 883	873A 873B 873C 873E 882B 883	8828 883
29.9-30	FIXED-SATELLITE (Earth-to-s) MOBILE-SATELLITE (Earth-to-Earth Exploration-Satellite (Ea	-space) rth-to-space) 882C
	873A 873B 873C 882 88	2A 882B 883
30-31	FIXED-SATELLITE (Earth-to-s) MOBILE-SATELLITE (Earth-to- Standard Frequency and Time (space-to-Earth)	-space)
	883	
31-31.3	FIXED MOBILE Standard Frequency and Time (space-to-Earth) Space Research 884	s Signal-Satellite
	885 886	
31.3-31.5	EARTH EXPLORATION-SATE RADIO ASTRONOMY SPACE RESEARCH (passive)	LLITE (passive)
	887	
31.5-31.8 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile	31.5-31.8 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)	31.5-31.8 EARTH EXPLORATION- SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile
888 889	888	888
31.8-32	RADIONAVIGATION SPACE RESEARCH (deep spar	
	892 893	

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32-32.3	RADIONAVIGATION INTER-SATELLITE SPACE RESEARCH (deep space) (space-to-Earth)
·	893
32.3-33	INTER-SATELLITE RADIONAVIGATION
	893
33-33.4	RADIONAVIGATION
33.4-34.2	RADIOLOCATION
34.2-34.7	RADIOLOCATION SPACE RESEARCH (deep space) (Earth-to-space)
34.7-35.2	RADIOLOCATION Space Research
35.2-36	METEOROLOGICAL AIDS RADIOLOCATION
	897
36-37	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)
	898
37-37.5	FIXED MOBILE SPACE RESEARCH (space-to-Earth)

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REGION 1	REGION 2 REGION 3	
32-32.3	INTER-SATELLITE RADIONAVIGATION SPACE RESEARCH (deep space) (space-to-Earth)	
	892 893	
32.3-33	INTER-SATELLITE RADIONA VIGATION	
	892 893	i
33-33.4	RADIONAVIGATION	
	892	
33.4-34.2	RADIOLOCATION	
	892 894	Ì
34.2-34.7	RADIOLOCATION SPACE RESEARCH (deep space) (Earth-to-space)	
	894	
34.7-35.2	RADIOLOCATION Space Research 896	
	894	
35.2-36	METEOROLOGICAL AIDS RADIOLOCATION	
	894 897	İ
36-37	EARTH EXPLORATION-SATELLITE (passive) FIXED MOBILE SPACE RESEARCH (passive)	
· · · · · · · · · · · · · · · · · · ·	898	_
37-37.5	FIXED MOBILE SPACE RESEARCH (space-to-Earth)	

### CANADIAN ALLOCATION TABLE

37.5-38	FIXED MOBILE FIXED-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Earth Exploration Satellite (space-to-Earth)
38-39.5	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Earth Exploration-Satellite (space-to-Earth)
39.5-40	FIXED FIXED-SATELLITE (space-to-Earth) C49 MOBILE MOBILE-SATELLITE (space-to-Earth) C50 Earth Exploration-Satellite (space-to-Earth)
40-40.5	FIXED FIXED-SATELLITE (space-to-Earth) C49 MOBILE MOBILE-SATELLITE (space-to-Earth) C50 EARTH EXPLORATION-SATELLITE (Earth-to-space) SPACE RESEARCH (Earth-to-space) Earth Exploration-Satellite (space-to-Earth)
40.5-42.5	BROADCASTING-SATELLITE //BROADCASTING/ Fixed Mobile
42.5-43.5	FIXED FIXED-SATELLITE (Earth-to-space) 901 MOBILE except aeronautical mobile RADIO ASTRONOMY 900
43.5-47	MOBILE 902 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 903
47-47.2	AMATEUR AMATEUR-SATELLITE

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REGION 1	REGION 2	REGION 3		
37.5-38	FIXED FIXED-SATELLITE (space-to-Earth) MDBILE SPACE RESEARCH (space-to-Earth) Earth Exploration-Satellite (space-to-Earth)			
38-39.5	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE Earth Exploration-Satellite (space-to-Earth)			
39.5-40	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) Earth Exploration-Satellite (space-to-Earth)			
40-40.5	FIXED FIXED-SATELLITE (space-to-Ex MOBILE MOBILE-SATELLITE (space-to- EARTH EXPLORATION-SATEL (Earth-to-space) SPACE RESEACH (Earth-to-sp. Earth Exploration-Satellite (spa	Earth) LITE ace)		
40.5-42.5	BROADCASTING-SATELLITE /BROADCASTING/ Fixed Mobile			
42.5-43.5	FIXED FIXEO-SATELLITE (Earth-to-sp MOBILE except aeronautical m RADIO ASTRONOMY 900			
43.5-47	MOBILE 902 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE 903			
47-47.2	AMATEUR AMATEUR-SATELLITE			

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66-71	MOBILE 902 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE
71-74	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE MOBILE-SATELLITE (Earth-to-space) 906
74-75.5	FIXED FIXED-SATELLITE (Earth-to-space) MOBILE Space Research (space-to-Earth)
75.5-76	AMATEUR AMATEUR-SATELLITE Space Research (space-to-Earth)
76-81	RADIOLOCATION Amateur Amateur-Satellite Space Research (space-to-Earth)
	912
81-84	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth) Space Research (space-to-Earth)
	FIXED MOBILE BROADCASTING BROADCASTING-SATELLITE 913
	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)

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REGION 1	REGION 2	REGION 3		
66-71	MOBILE 902 MOBILE-SATELLITE RADIONAVIGATION RADIONAVIGATION-SATELLITE			
	903			
71-74	NOTE: THE PROPERTY OF THE PROP			
74-75.5	FIXED FIXED-SATELLITE (Earth-to-s) MOBILE Space Research (space-to-Ea			
75.5-76	AMATEUR AMATEUR-SATELLITE Space Research (space-to-Ear	th)		
76-81	RADIOLOCATIDN Amateur Amateur-Satellite Space Research (space-to-Ear			
	912 .			
81-84	FIXED FIXED-SATELLITE (space-to-E MOBILE MOBILE-SATELLITE (space-to Space Research (space-to-Earl	-Earth)		
84-86	FIXED MOBILE BROADCASTING BROADCASTING-SATELLITE			
	913			
86-92	EARTH EXPLORATION-SATE RADIO ASTRONOMY SPACE RESEARCH (passive)	LLITE (passive)		
	. 907			

## CANADIAN ALLOCATION TABLE

142-144	AMATEUR AMATEUR-SATELLITE
144-149	RADIOLOCATION Amateur Amateur-Satellite 918
149-150	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE
150-151	EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) MOBILE SPACE RESEARCH (passive)
151-156	FIXED FIXED-SATELUTE (space-to-Earth) MOBILE
156-158	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE EARTH EXPLORATION-SATELLITE (passive)
158-164	FIXED FIXED-SATELLITE (space-to-Earth) MDBILE .
164-168	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)
168-170	FIXED MOBILE

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DECION 1	accion o	ncolou a		
REGION 1 142-144	REGION 2	REGION 3		
142-144	AMATEUR AMATEUR-SATELLITE			
144-149	RADIOLOCATION Amateur Amateur-Satellite 918			
149-150	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE			
150-151	EARTH EXPLORATION-SATELLITE (passive) FIXED FIXED-SATELLITE (space-to-Earth) MOBILE SPACE RESEARCH (passive)			
151-156	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE			
156-158	FIXED FIXED-SATELLITE (space-to-Earth) MDBILE EARTH EXPLORATION-SATELLITE (passive)			
158-164	FIXED FIXED-SATELLITE (space-to-Earth) MOBILE			
164-168	EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)			
168-170	FIXED MOBILE			

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#### 4. NEW INTERNATIONAL FOOTNOTES (APPLICABLE TO REGION 2 COUNTRIES)

The new ITU international footnotes and modifications to or suppression of footnotes adopted at WARC-92 which pertain to Region 2 countries, are listed as follows:

- 481 (WARC-92) SUP
- 521A (WARC-92) The use of the bands 5 900 5 950 kHz, 7 300 7 350 kHz, 9 400 9500 kHz, 11 600 11 650 kHz, 12 050 12 100 kHz, 13 570 13 600 kHz, 13 800 13 870 kHz, 15 600 15 800 kHz, 17 480 17 550 kHz and 18 900 19 020 kHz by the broadcasting service is limited to single-sideband emissions with the characteristics specified in Appendix 45 to the Radio Regulations.
- 521B (WARC-92) The use of the bands 5 900 5 950 kHz, 7 300 7 350 kHz, 9 400 9500 kHz, 11 600 11 650 kHz, 12 050 12 100 kHz, 13 570 13 600 kHz, 13 800 13 870 kHz, 15 600 15 800 kHz, 17 480 17 550 kHz and 18 900 19 020 kHz by the broadcasting service shall be subject to the planning procedures to be drawn up by a competent world administrative radio conference.
- 521C (WARC-92) The band 5 900 5 950 kHz is allocated, until 1 April 2007, to the fixed service on a primary basis, as well as to the following services: in Region 1 to the land mobile service on a primary basis, in Region 2 to the mobile except aeronautical mobile (R) service on a primary basis, and in Region 3 to the mobile except aeronautical mobile (R) service on a secondary basis, subject to application of the procedure referred to in Resolution 21 (WARC-92). After 1 April 2007, frequencies in this band may be used by stations in the above-mentioned services, communicating only within the boundary of the country in which they are located, on the condition that harmful interference is not caused to the broadcasting service. When using frequencies for these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations.
- (WARC-92) The band 7 300 7 350 kHz is allocated, until 1 April 2007, to the fixed service on a primary basis and to the land mobile service on a secondary basis, subject to application of the procedure referred to in Resolution 21 (WARC-92). After 1 April 2007, frequencies in this band may be used by stations in the above-mentioned services, communicating only within the boundary of the country in which they are located, on condition that harmful interference is not caused to the broadcasting service. When using frequencies for these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations.
- 529B (WARC-92) The bands 9 400 9 500 kHz, 11 600 11 650 kHz, 12 050 12 100 kHz, 15 600 15 800 kHz, 17 480 17 550 kHz and 18 900 19 020 kHz are allocated to the fixed service on a primary basis until 1 April 2007, subject to application of the procedure referred to in Resolution 21 (WARC-92). After 1 April 2007, frequencies in these bands may be used by stations in the fixed service, communicating only within the boundary of the country in which they are located, on condition that harmful interference is not caused to the broadcasting service. When using frequencies in the fixed service, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations.
- 532 (WARC-92) SUP

- (WARC-92) The bands 13 570 13 600 kHz and 13 800 13 870 kHz are allocated, until 1 April 2007, to the fixed service on a primary basis and to the mobile except aeronautical mobile (R) service on a secondary basis, subject to application of the procedure referred to in Resolution 21 (WARC-92). After 1 April 2007, frequencies in these bands may be used by stations in the above-mentioned services, communicating only within the boundary of the country in which they are located, on the condition that harmful interference is not caused to the broadcasting service. When using frequencies in these services, administrations are urged to use the minimum power required and to take account of the seasonal use of frequencies by the broadcasting service published in accordance with the Radio Regulations.
- 537 (WARC-92) SUP
- 543 (WARC-92) SUP
- 544 (WARC-92) SUP
- 569 (WARC-92) SUP
- 572 (WARC-92) The frequency 75 MHz is assigned to marker beacons. Administrations shall refrain from assigning frequencies close to the limits of the guard band to stations of other services which, because of their power or geographical position, might cause harmful interference or otherwise place a constraint on marker beacons.
  - Every effort should be made to improve further the characteristics of airborne receivers and to limit the power of transmitting stations close to the limits 74.8 MHz and 75.2 MHz.
- (WARC-92) Different category of service: in Afghanistan, Saudi Arabia, Bahrain, Bangladesh, Brunei, Darussalam, China, Cuba, the United Arab Emirates, India, Indonesia, Iran, Iraq, Malaysia, Oman, Pakistan, Philippines, Qatar, Singapore, Sri Lanka, Thailand, Yemen and Yugoslavia, the band 137-138 MHz is allocated to the fixed and mobile, except aeronautical mobile (R), services on a primary basis (see No.425).
- (WARC-92) The use of the band 137 138 MHz by the mobile-satellite service is subject to the application of the coordination and notification procedures set forth in Resolution 46(WARC-92). However, coordination of a space station of the mobile-satellite service with respect to terrestrial services is required only if the power flux-density produced by the station exceeds -125 dB (W/m² / 4 kHz) at the Earth's surface. The above power flux-density limit shall apply until such time as a competent world administrative radio conference revises it. In making assignments to the space stations in the mobile-satellite service in the above band, administrations shall take all practicable steps to protect the radio astronomy service in the 150.05 153 MHz band from harmful interference from unwanted emissions.
- 599B (WARC-92) The use of the bands 137 138 MHz, 148 149.9 MHz and 400.15 401 MHz by the mobile-satellite service and the band 149.9 150.05 MHz by the land mobile-satellite service is limited to non-geostationary-satellite systems.
- 608A (WARC-92) The use of the band 148 149.9 MHz by the mobile-satellite service is subject to the application of the coordination and notification procedures set forth in Resolution 46 (WARC-92). The mobile-satellite service shall not constrain the development and use of fixed, mobile and space operation services in the band 148 149.9 MHz. Mobile earth stations in the mobile-satellite service shall not produce a power flux-density in excess of -150 dB (W/m² / 4 kHz) outside national boundaries.
- 608B (WARC-92)The use of the band 149.9 150.05 MHz by the land mobile-satellite service is subject to the application of the coordination and notification procedures set forth in Resolution 46 (WARC-92). The land mobile-satellite service shall not constrain the development and use of the radionavigation-satellite service in the band 149.9 150.05 MHz. Land mobile earth stations of the land mobile-satellite service shall not produce power flux-density in excess of -150 dB (W/m² / 4 kHz) outside national boundaries.

- 608C (WARC-92) Stations of the mobile-satellite service in the band 148 149.9 MHz shall not cause harmful interference to, or claim protection from stations of the fixed or mobile services in the following countries: Algeria, the Federal Republic of Germany, Saudi Arabia, Australia, Austria, Bangladesh, Belarus, Belgium, Brunei, Darussalam, Bulgaria, Cameroon, Canada, Cyprus, Colombia, Congo, Cuba, Denmark, Egypt, the United Arab Emirates, Ecuador, Spain, Ethiopia, the Russian Federation, Finland, France, Ghana, Greece, Honduras, Hungary, Iran, Ireland, Iceland, Israel, Italy, Japan, Jordan, Kenya, Libya, Liechtenstein, Luxembourg, Malaysia, Mali, Malta, Mauritania, Mozambique, Namibia, New Zealand, Norway, Oman, Pakistan, Panama, Papua New Guinea, the Netherlands, Philippines, Poland, Portugal, Qatar, Syria, Romania, the United Kingdom, Singapore, Sri Lanka, Sweden, Switzerland, Suriname, Swaziland, Tanzania, Chad, the Czech and Slovak Federal Republic, Thailand, Tunisia, Turkey, Ukraine, Yemen and Yugoslavia that operate in accordance with the Table of Frequency Allocations.
- 609B (WARC-92) In the band 149.9 150.05 MHz, the allocation to the land mobile-satellite service shall be on a secondary basis until 1 January 1997.
- 614 (WARC-92) SUP
- 627 (WARC-92) In Region 2, no new stations in the radiolocation service may be authorized in the band 216 225 MHz. Stations authorized prior to 1 January 1990 may continue to operate on a secondary basis.
- 641A (WARC-92) The bands 312 315 MHz (Earth-to-space) and 387 390 MHz (space-to-Earth) in the mobile-satellite service may also be used by non-geostationary-satellite systems. Such use is subject to the application of the coordination and notification procedures set forth in Resolution 46 (WARC-92).
- (WARC-92) Additional allocation: in Afghanistan, Saudi Arabia, Bahrain, Bulgaria, Colombia, Costa Rica, Cuba, Egypt, the United Arab Emirates, Ecuador, Hungary, Indonesia, Iran, Iraq, Israel, Jordan, Kuwait, Liberia, Malaysia, Nigeria, Oman, Pakistan, the Philippines, Poland, Qatar, Syria, the German Democratic Republic, Romania, Singapore, Somalia, Sri Lanka, Czechoslovakia, Thailand, the U.S.S.R. and Yugoslavia, the band 400.05 401 MHz is also allocated to the fixed and mobile services on a primary basis.
- 647A (WARC-92) The band 400.15 401 MHz is also allocated to the space research service in the space to-space direction for communications with manned space vehicles. In this application, the space research service will not be regarded as a safety service.
- (WARC-92) The use of the band 400.15 401 MHz by the mobile-satellite service is subject to the application of the coordination and notification procedures set forth in Resolution 46 (WARC-92). However, coordination of a space station of the mobile-satellite service with respect to terrestrial services is required only if the power flux-density produced by the station exceeds -125 dB (w/m² / 4 kHz) at the Earth's surface. The above power flux-density limit shall apply until such time as a competent world administrative radio conference revises it. In making assignments to the space stations in the mobile-satellite service in the above band, administrations shall take all practicable steps to protect the radio astronomy service in the band 406.1 410 MHz from harmful interference from unwanted emissions.
- 651A (WARC-92) Use of the band 410 420 MHz by the space research service is limited to communications within 5 km of an orbiting, manned space vehicle.
- 663 (WARC-92) Additional allocation: in the French Overseas Departments in Region 2 and India, the band 433.75 434.25 MHz is also allocated to the space operation service (Earth-to-space) on a primary basis. In France and in Brazil, the band is allocated to the same service on a secondary basis.
- 672 (WARC-92) Different category of service: in Afghanistan, Bulgaria, China, Cuba, Japan, Mongolia, Poland, Czechoslovakia and the U.S.S.R., the allocation of the band 460-470 MHz to the meteorological-satellite service (space-to-Earth) is on a primary basis (see No. 425) and is subject to agreement obtained under the procedure set forth in Article 14.

- 675 (WARC-92) Different category of service: in Chile, Colombia, Cuba, Ecuador, the United States, Guyana, Honduras, Jamaica, Mexico and Panama, the allocation of the bands 470 512 MHz and 614 806 MHz to the fixed and mobile services is on a primary basis (see No. 425), subject to agreement obtained under the procedure set forth in Article 14.
- 678 (WARC-92) Additional allocation: in Costa Rica, Cuba, El Salvador, Ecuador, the United States, Guatemala, Guyana, Honduras, Jamaica, Mexico and Venezuela, the band 512 608 MHz is also allocated to the fixed and mobile services on a primary basis, subject to agreement obtained under the procedure set forth in Article 14.
- 700A (WARC-92) Additional allocation: in Canada, the United States and Mexico, the bands 849-851 MHz and 894-896 MHz are also allocated to the aeronautical mobile service on a primary basis, for public correspondence with aircraft. The use of the band 849-851 MHz is limited to transmissions from aeronautical stations and the use of the band 894-896 MHz is limited to transmissions from aircraft stations.
- 708 (WARC-92) SUP
- 722A (WARC-92) Use of the band 1 452 1 492 MHz by the broadcasting-satellite service, and by the broadcasting service, is limited to digital audio broadcasting and is subject to the provisions of Resolution 528 (WARC-92).
- 722B (WARC-92) Different category of service: in the Federal Republic of Germany, Bangladesh, Botswana, Bulgaria, Burkina Faso, Colombia, Cuba, Denmark, Egypt, Ecuador, Spain, Greece, Hungary, Ireland, Italy, Jordan, Kenya, Malawi, Mozambique, Panama, Poland, Portugal, United Kingdom, Sri Lanka, Sweden, Swaziland, Czech and Slovak Federal Republic, Yemen, Yugoslavia and Zimbabwe, the allocation of the band 1 452 1 492 MHz to the broadcasting-satellite service and the broadcasting service is on a secondary basis until 1 April 2007.
- 722C (WARC-92) Alternative allocation: in the United States, the band 1 452 1 525 MHz is allocated to the fixed and mobile services on a primary basis. (See also No. 723.)
- 723C (WARC-92) The use of the band 1 492 1 525 MHz by the mobile-satellite service is subject to the application of the coordination and notification procedures set forth in Resolution 46 (WARC-92). However, with the exception of the situation referred to in No. 723, on a provisional basis, coordination of space stations of the mobile-satellite service with respect to terrestrial services is required only if the power flux-density produced at the Earth's surface exceeds the limits in No. 2566. In respect of assignments operating in this band, the provisions of Section II, paragraph 2.2 of Resolution 46 (WARC-92) shall also be applied to geostationary transmitting space stations with respect to terrestrial stations.
- 726A (WARC-92) The bands 1 525 1 544 MHz, 1 545 1 559 MHz, 1 626.5 1 645.5 MHz and 1 646.5 1 660.5 MHz shall not be used for feeder links of any service. In exceptional circumstances, however, an earth station at a specified fixed point in any of the mobile-satellite services may be authorized by an administration to communicate via space stations using these bands.
- 726B (WARC-92) The use of the bands 1 525 1 530 MHz, 1 533 1 544 MHz, 1 626.5 -1 631.5 MHz and 1 634.5 1 645.5 MHz by the land mobile-satellite service is limited to non-speech low bit-rate data transmissions.
- 726C (WARC-92) Additional allocation: in Argentina, Australia, Brazil, Canada, the United States, Malaysia and Mexico, the band 1 530 1 544 MHz is also allocated to the mobile-satellite (space-to-Earth) service, and the band 1 626.5 1 645.5 MHz is also allocated to the mobile-satellite (Earth-to-space) service, on a primary basis subject to the following conditions: maritime mobile-satellite distress and safety communications shall have priority access and immediate availability over all other mobile-satellite communications operating under this provision. Communications of mobile-satellite system stations not participating in the global maritime distress and safety system (GMDSS) shall operate on a secondary basis to distress and safety communications of stations operating in the GMDSS. Account shall be taken of the priority of safety-related communications in the other mobile-satellite services.

- 726D (WARC-92) The use of the bands 1 525 1 559 MHz and 1 626.5 1 660.5 MHz by the mobile-satellite services are subject to the application of the coordination and notification procedures set forth in Resolution 46 (WARC-92). In Regions 1 and 3 in the band 1 525 1 530 MHz coordination of space stations of the mobile-satellite services with respect to terrestrial services is required only if the power flux-density produced at the Earth's surface exceeds the limits in No. 2566. In respect of assignments operating in the band 1 525 1 530 MHz, the provisions of Section II, paragraph 2.2 of Resolution 46 (WARC-92) shall also be applied to geostationary transmitting space stations with respect to terrestrial stations.
- 730B (WARC-92) Alternative allocation: in Australia, Canada and Mexico, the band 1 555 1 559 MHz is allocated to the mobile-satellite (space-to-Earth) service, the band 1 656.5 1 660 MHz is allocated to the mobile-satellite (Earth-to-space) service, and the band 1 660 1 660.5 MHz is allocated to the mobile-satellite (Earth-to-space) and the radio astronomy services, on a primary basis.
- 730C (WARC-92) Alternative allocation: in Argentina and the United States, the band 1 555 1 559 MHz is allocated to the mobile-satellite (space-to-Earth) service, the band 1 656.5 1 660 MHz is allocated to the mobile-satellite (Earth-to-space) service, and the band 1 660 1 660.5 MHz is allocated to the mobile-satellite (Earth-to-space) and radio astronomy services, on a primary basis subject to the following conditions: the aeronautical mobile-satellite (R) service shall have priority access and immediate availability over all other mobile-satellite communications within a network operating under this provision; mobile-satellite systems shall be interoperable with the aeronautical mobile-satellite (R) service; account shall be taken of the priority of safety-related communications in the other mobile-satellite services.

### 731A to 731D (WARC-92) SUP

- 731E (WARC-92) The use of the band 1 610 1 626.5 MHz by the mobile-satellite service (Earth-to-space) and by the radiodetermination-satellite service (Earth-to-space) is subject to the application of the coordination and notification procedures set forth in Resolution 46 (WARC-92). A mobile earth station operating in either of the services in this band shall not produce an e.i.r.p. density in excess of -15 dB(W/4kHz) in the part of the band used by systems operating in accordance with the provisions of No. 732, unless otherwise agreed by the affected administrations. In the part of the band where such systems are not operating, a value of -3 dB(W/4 kHz) is applicable. Stations of the mobile-satellite service shall not cause harmful interference to, or claim protection from, stations in the aeronautical radionavigation service, stations operating in accordance with the provisions of No. 732 and stations in the fixed service operating in accordance with the provisions of No. 730.
- 731F (WARC-92) The use of the band 1 613.8 1 626.5 MHz by the mobile-satellite service (space-to-Earth) is subject to the application of the coordination and notification procedures set forth in Resolution 46 (WARC-92).
- 733A (WARC-92) With respect to the radiodetermination-satellite and mobile-satellite services the provisions of No. 953 do not apply in the band 1 610 1 626.5 MHz.
- 733E (WARC-92) Harmful interference shall not be caused to stations of the radio astronomy service using the band 1 610.6 1 613.8 MHz by stations of the radiodetermination-satellite and mobile-satellite services. (No. 2904 applies).
- 734 (WARC-92) In making assignments to stations of other services, administrations are urged to take all practicable steps to protect the radio astronomy service in the band 1 610.6 1 613.8 MHz from harmful interference. Emissions from space or airborne stations can be particularly serious sources of interference to the radio astronomy service (see Nos. 343 and 344 and Article 36).
- 735A (WARC-92) In the band 1 675 1 710 MHz, stations in the mobile-satellite service shall not cause harmful interference to, nor constrain the development of, the meteorological-satellite and meteorological aids services (see Resolution 213 (WARC-92)) and the use of this band shall be subject to the provisions of Resolution 46 (WARC-92).

- 740A (WARC-92) The bands 1 670 1 675 MHz and 1 800 1 805 MHz are intended for use, on a worldwide basis, by administrations wishing to implement aeronautical public correspondence. The use of the band 1 670 1 675 MHz by stations in the systems for public correspondence with aircraft is limited to transmissions from aeronautical stations and the use of the band 1 800 1 805 MHz is limited to transmissions from aircraft stations.
- 746A (WARC-92) The frequency bands 1 885 2 025 MHz and 2 110 2 200 MHz are intended for use, on a worldwide basis, by administrations wishing to implement the future public land mobile telecommunication systems (FPLMTS). Such use does not preclude the use of these bands by other services to which these bands are allocated. The frequency bands should be made available for FPLMTS in accordance with Resolution 212 (WARC-92).
- (WARC-92) The use of the bands 1 970 2 010 MHz and 2 160 2 200 MHz by the mobile-satellite service shall not commence before 1 January 2005 and is subject to the application of the coordination and notification procedures set forth in Resolution 46 (WARC-92). In the band 2 160 2 200 MHz coordination of space stations of the mobile-satellite service with respect to terrestrial services is required only if the power flux-density produced at the Earth's surface exceeds the limits in No. 2566. In respect of assignments operating in this band, the provisions of Section II, paragraph 2.2 of Resolution 46 (WARC-92) shall also be applied to geostationary transmitting space stations with respect to terrestrial stations.
- 746C (WARC-92) In the United States of America, the use of the bands 1 970 2 010 MHz and 2 160 2 200 MHz by the mobile-satellite service shall not commence before 1 January 1996.
- 747 (WARC-92) SUP
- 747A (WARC-92) In making assignments to the mobile service in the bands 2 025 -2 110 MHz and 2 200 2 290 MHz, administrations shall take into account Resolution 211 (WARC-92).

#### 748 and 750 (WARC-92) SUP

- 750A (WARC-92) Administrations are urged to take all practicable measures to ensure that space-to-space transmissions between two or more non-geostationary satellites, in the space research, space operations and Earth exploration-satellite services in the bands 2 025 2 110 MHz and 2 200 2 290 MHz, shall not impose any constraints on Earth-to-space, space-to-Earth and other space-to-space transmissions of those services and in those bands between geostationary and non-geostationary satellites.
- 750B (WARC-92) Additional allocation: in the United States of America and India, the band 2 310 2 360 MHz is also allocated to the broadcasting-satellite service (sound) and complementary terrestrial sound broadcasting service on a primary basis. Such use is limited to digital audio broadcasting and is subject to the provisions of Resolution 528 (WARC-92).
- 751 (WARC-92) In Australia, the United States and Papua New Guinea, the use of the band 2 300 2 390 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile services. In Canada, the use of the band 2 300 2 483.5 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile services.
- 751B (WARC-92) Space stations of the broadcasting-satellite service in the band 2 310 -2 360 MHz operating in accordance with No. 750B that may affect the services to which this band is allocated in other countries shall be coordinated and notified in accordance with Resolution 33 (WARC-79). Complementary terrestrial broadcasting stations shall be subject to bilateral coordination with neighbouring countries prior to their bringing into use.

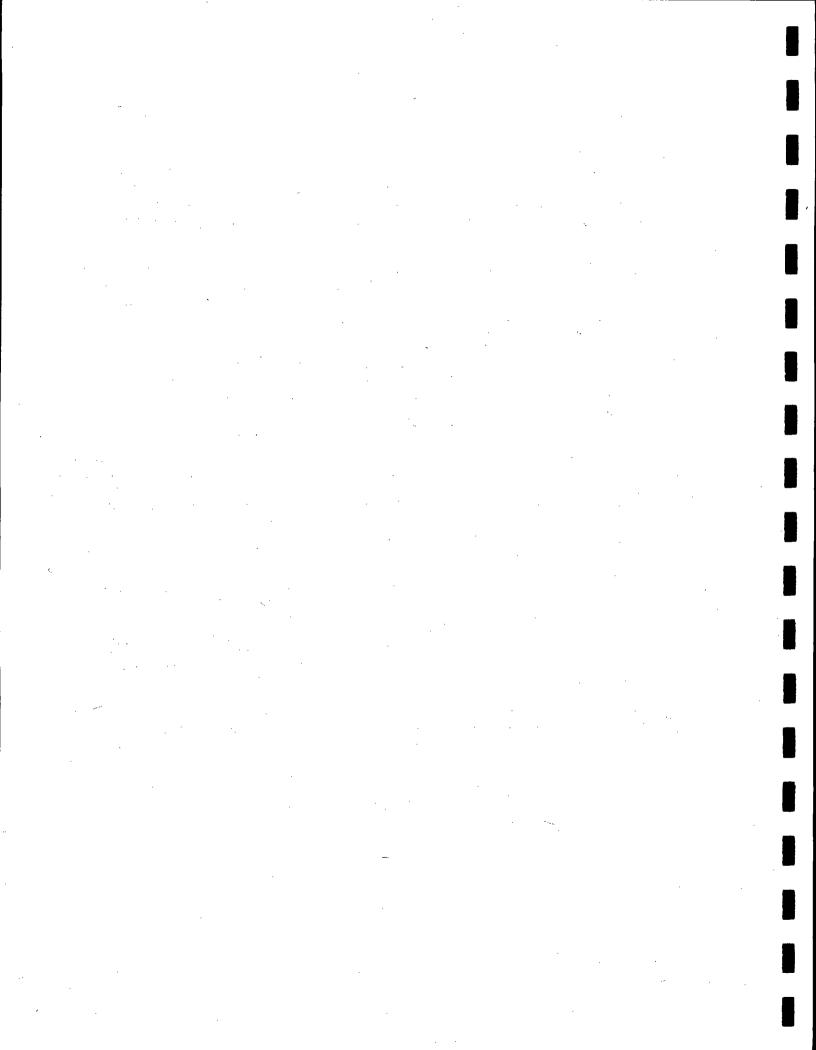
- 753F (WARC-92) The use of the band 2 483.5 2 500 MHz by the mobile-satellite and the radiodetermination-satellite services is subject to the application of the coordination and notification procedures set forth in Resolution 46 (WARC-92). Coordination of space stations of the mobile-satellite and radiodetermination-satellite services with respect to terrestrial services is required only if the power flux-density produced at the Earth's surface exceeds the limits in No. 2566. In respect of assignments operating in this band, the provisions of Section II, paragraph 2.2 of Resolution 46 (WARC-92) shall also be applied to geostationary transmitting space stations with respect to terrestrial stations.
- (WARC-92) Subject to agreement obtained under the procedure set forth in Article 14, the band 2 520 2 535 MHz (until 1 January 2005 the band 2 500 2 535 MHz) may also be used for the mobile-satellite (space-to-Earth), except aeronautical mobile-satellite, service for operation limited to within national boundaries. The coordination and notification procedures set forth in Resolution 46 (WARC-92) apply. However, coordination of space stations of the mobile-satellite service with respect to terrestrial services is required only if the power flux-density produced by the station exceeds the limits in No. 2566.
- 755A (WARC-92) In the band 2 500 2 520 MHz, the power flux-density at the surface of the Earth from space stations operating in the mobile-satellite (space-to-Earth) service shall not exceed -152 dB(W/m²/4 kHz) in Argentina, unless otherwise agreed by the administrations concerned.
- 757 (WARC-92) The use of the band 2 520 2 670 MHz by the broadcasting-satellite service is limited to national and regional systems for community reception and such use shall be subject to agreement obtained under the procedure set forth in Article 14. The power flux-density at the Earth's surface shall not exceed the values given in Nos. 2561 to 2564.
- (WARC-92) The allocation of the frequency band 2 500 2 520 MHz to the mobile-satellite service (space-to-Earth) shall be effective on 1 January 2005 and is subject to the application of the coordination and notification procedures set forth in Resolution 46 (WARC-92). Coordination of space stations of the mobile-satellite service with respect to terrestrial services is required only if the power flux-density produced at the Earth's surface exceeds the limits in No. 2566. In respect of assignments operating in this band, the provisions of Section II, paragraph 2.2 of Resolution 46 (WARC-92) shall also be applied to geostationary transmitting space stations with respect to terrestrial stations.
- 764A (WARC-92) The allocation of the frequency band 2 670 2 690 MHz to the mobile-satellite service shall be effective from 1 January 2005. When introducing mobile-satellite systems in this band administrations shall take all necessary steps to protect the satellite systems operating in this band prior to 3 March 1992. The coordination of mobile-satellite systems in the band shall be in accordance with Resolution 46 (WARC-92).
- (WARC-92) Subject to agreement obtained under the procedure set forth in Article 14, the band 2 655 2 670 MHz (until 1 January 2005 the band 2 655 2 690 MHz) may also be used for the mobile-satellite (Earth-to-space), except aeronautical mobile-satellite, service for operation limited to within national boundaries. The coordination and notification procedures set forth in Resolution 46 (WARC-92) apply.
- 777 (WARC-92) Additional allocation: in Bulgaria, Canada, Cuba, Mongolia, Poland, the German Democratic Republic, Romania, Czechoslovakia and the U.S.S.R., the band 3 100 3 300 MHz is also allocated to the radionavigation service on a primary basis.
- 780 (WARC-92) Additional allocation: in Bulgaria, Cuba, Mongolia, Poland, the German Democratic Republic, Romania, Czechoslovakia and the U.S.S.R., the band 3 300 3 400 MHz is also allocated to the radionavigation service on a primary basis.
- (WARC-92) Additional allocation: in Saudi Arabia, Bahrain, Bulgaria, Cameroon, China, Colombia, the Republic of Korea, Costa Rica, Cuba, Egypt, the United Arab Emirates, Ecuador, Iran, Iraq, Israel, Japan, Jordan, Kuwait, the Lebanon, Mongolia, Pakistan, Poland, Qatar, the German Democratic Republic, Dem. People's Rep. of Korea, Romania, Czechoslovakia, the U.S.S.R., Yemen and Yugoslavia, the band 10.68 10.7 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. Such use is limited to equipment in operation by 1 January 1985.

- 855A (WARC-92) In the band 13.75 14 GHz, the e.i.r.p. of any emission from an earth station in the fixed-satellite service shall be at least 68 dBW, and should not exceed 85 dBW, with a minimum antenna diameter of 4.5 metres. In addition the e.i.r.p., averaged over one second, radiated by a station in the radiolocation and radionavigation services towards the geostationary-satellite orbit shall not exceed 59 dBW. These values shall apply subject to review by the CCIR and until they are changed by a future competent world administrative radio conference (see Resolution 112 (WARC-92)).
- (WARC-92) In the band 13.75 14 GHz geostationary space stations in the space research service, for which information for advance publication has been received by the IFRB prior to 31 January 1992, shall operate on an equal basis with stations in the fixed-satellite service; after that date new geostationary space stations in the space research service will operate on a secondary basis. Until 1 January 2000, stations in the fixed-satellite service shall not cause harmful interference to non-geostationary space stations in the space research and Earth exploration-satellite services; after that date these non-geostationary space stations will operate on a secondary basis in relation to the fixed-satellite service.
- 868A (WARC-92) In the band 17.3 17.8 GHz, sharing between the fixed-satellite service (Earth-to-space) and the broadcasting-satellite service shall also be in accordance with the provisions of section 1 of Annex 4 of Appendix 30A.
- 869A (WARC-92) In Region 2, the allocation to the broadcasting-satellite service in the band 17.3 17.8 GHz shall come into effect on 1 April 2007. After that date, use of the fixed-satellite (space-to-Earth) service in the band 17.7 17.8 GHz shall not claim protection from and shall not cause harmful interference to operating systems in the broadcasting-satellite service.
- 869B (WARC-92) In Region 2, the allocation of the band 17.7 17.8 GHz to the mobile service is on a primary basis until 31 March 2007.
- 870A (WARC-92) The use of the band 18.1 18.4 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service.
- 873A (WARC-92) In order to facilitate interregional coordination between networks in the mobile-satellite and fixed-satellite services, carriers in the mobile-satellite service that are most susceptible to interference shall, to the extent practicable, be located in the higher parts of the bands 19.7 20.2 GHz and 29.5 30 GHz.
- 873B (WARC-92) In the bands 19.7 20.2 GHz and 29.5 30 GHz in Region 2, and in the bands 20.1 20.2 GHz and 29.9 30 GHz in Regions 1 and 3, networks which are both in the fixed-satellite service and in the mobile-satellite service may include links between earth stations at specified or unspecified points or while in motion, through one or more satellites for point-to-point and point-to-multipoint communications.
- 873C (WARC-92) In the bands 19.7 20.2 GHz and 29.5 30 GHz, the provisions of No. 953 do not apply with respect to the mobile-satellite service.
- (WARC-92) The allocation to the mobile-satellite service is intended for use by networks which use narrow spot-beam antennas and other advanced technology at the space stations. Administrations operating systems in the mobile-satellite service in the band 19.7 20.1 GHz in Region 2 and in the band 20.1 20.2 GHz shall take all practicable steps to ensure the continued availability of these bands for administrations operating fixed and mobile systems in accordance with the provisions of No. 873.
- 873E (WARC-92) The use of the bands 19.7 20.1 GHz and 29.5 29.9 GHz by the mobile-satellite service in Region 2 is limited to satellite networks which are both in the fixed-satellite service and in the mobile-satellite service as described in No. 873B.
- 877 (WARC-92) SUP
- 881A (WARC-92) Use of the 25.25 27.5 GHz band by the inter-satellite service is limited to space research and Earth exploration-satellite applications, and also transmissions of data originating from industrial and medical activities in space.

- 881B (WARC-92) Space services using non-geostationary satellites operating in the inter-satellite service in the band 27 27.5 GHz are exempt from the provisions of No. 2613.
- 882A (WARC-92) Additional allocation: the bands 27.500 27.501 GHz and 29.999 -30.000 GHz are also allocated to the fixed-satellite service (space-to-Earth) on a primary basis for the beacon transmissions intended for up-link power control.

Such space-to-Earth transmissions shall not exceed an equivalent isotropically radiated power (e.i.r.p.) of +10 dBW in the direction of adjacent satellites on the geostationary-satellite orbit. In the band 27.500 - 27.501 GHz, such space-to-Earth transmissions shall not produce a power flux-density in excess of the values specified in No. 2578 on the Earth's surface.

- 882B (WARC-92) Additional allocation: the band 27.501 29.999 GHz is also allocated to the fixed-satellite service (space-to-Earth) on a secondary basis for beacon transmissions intended for up-link power control.
- 882C (WARC-92) In the band 28.5 30 GHz, the earth exploration-satellite service is limited to the transfer of data between stations and not to the primary collection of information by means of active or passive sensors.
- 882D (WARC-92) The band 27.5 30 GHz may be used by the fixed-satellite service (Earth-to-space) for the provision of feeder links for the broadcasting-satellite service.
- 882E (WARC-92) The inter-satellite service shall not claim protection from harmful interference from airport surface detection equipment stations of the radionavigation service.
- 882G (WARC-92) In the band 24.75 25.25 GHz, feeder links to stations of the broadcasting-satellite service shall have priority over other uses in the fixed-satellite service (Earth-to-space). Such other uses shall protect and shall not claim protection from existing and future operating feeder-link networks to such broadcasting satellite stations.
- (WARC-92) Different category of service: in Bulgaria, Cuba, Mongolia, Poland, the German Democratic Republic, Czechoslovakia and the U.S.S.R., the allocation of the band 31 31.3 GHz to the space research service is on a primary basis (see No. 425).
- 890 and 891 (WARC-92) SUP
- (WARC-92) In designing systems for the inter-satellite and radionavigation services in the band 32 33 GHz, and for the space research service (deep space) in the band 31.8 32.3 GHz, administrations shall take all necessary measures to prevent harmful interference between these services, bearing in mind the safety aspects of the radionavigation service (see Recommendation 707 (WARC-79)).
- 895 (WARC-92) SUP
- 896 (WARC-92) Different category of service: in Bulgaria, Cuba, Mongolia, the German Democratic Republic, Czechoslovakia and the U.S.S.R., the allocation of the band 34.7 35.2 GHz to the space research service is on a primary basis (see No. 425).



#### 5. CANADIAN FOOTNOTES

The complete set of Canadian footnotes to the Canadian Table are listed hereafter. This includes the new Canadian footnotes and any modifications or suppression of footnotes. Changes to the Canadian footnotes are identified by the indicator (CAN-94).

- C1 Users of frequencies below 9 kHz shall ensure that no harmful interference is caused to the services to which the bands above 9 kHz are allocated.
- C2 Scientific researchers using frequencies below 9 kHz are urged to advise the Department in order that such research may be afforded all practicable protection from harmful interference.
- C3 Provided no harmful interference is caused to the maritime mobile service, the frequencies between 2065 kHz and 2107 kHz may be used by stations of the fixed service communicating only within Canada's national borders, and whose mean power does not exceed 50 watts.
- C4 Provided no harmful interference is caused to the maritime mobile service, the bands 6200-6213.5 kHz and 6220.5-6525 kHz may be used exceptionally by stations of the fixed service communicating only within Canada's national borders, and whose mean power does not exceed 50 watts.
- C5 For the exclusive use of the Government of Canada.
- C5A The use of the radiolocation service is limited to Government of Canada shipborne radars. These operations are not permitted on inland waters of Canada.
- The band 10 100-10 150 kHz is allocated to the fixed service on a primary basis worldwide. In Canada, the band is allocated exclusively to the Amateur service. Canadian Amateur operations shall not cause interference to fixed service operations of other administrations and if such interference should occur, the Amateur service may be required to cease operations. The Amateur service in Canada may not claim protection from interference by the fixed service operations of other administrations.
- C7 (CAN-94) SUP
- Radio astronomy observations are carried out in the band 322-328.6 MHz and such operations will be protected from interference to the extent possible.
- C9 (CAN-94) Within Canada and after 1 April 2007, existing services may continue to operate, providing that harmful interference is not caused to existing or planned broadcasting services.
- C10 On the condition that harmful interference is not caused to the mobile or the fixed services, the Department may authorize frequencies between 420 and 430 MHz for use on a non-protected basis by the radiolocation service in coastal and off-shore regions of Canada where such radio-location operations may not be fully accommodated in the 430-450 MHz frequency band.
- C11 Television broadcast stations licensed prior to January 1, 1979, to operate in the frequency band 806-890 MHz (channels 70 to 83) will continue to operate on a primary basis until their reassignment to a lower frequency.
- C12 (CAN-94) SUP
- C12A (CAN-94) SUP
- C13 (CAN-94) SUP
- C14 Maritime radionavigation operations in the band 2850-2900 MHz are limited to shore based radars.
- C15 (CAN-94) SUP (see C49 and C50)

- C16 Users are urged, in their planning of operations in the band 10.7-10.95 GHz for the fixed-satellite service, to give all practicable protection to the passive operations in the adjacent band 10.6-10.7 GHz.
- In Region 2, in the band 11.7-12.2 GHz, transponders on space stations in the fixed-satellite service may be used additionally for transmissions in the broadcasting-satellite service, provided that such transmissions do not have a maximum e.i.r.p. greater than 53 dBW per television channel and do not cause greater interference or require more protection from interference than the coordinated fixed-satellite service frequency assignments. With respect to the space services, this band shall be used principally for the fixed-satellite service. The upper limit of this band shall be modified in accordance with the decisions of the 1983 regional administrative radio conference for Regional 2 (See No. 841)
- C18 In Region 3, the band 12.1-12.5 GHz is also allocated to the fixed-satellite (space-to-Earth) service limited to national and sub-regional systems. The power flux-density limits in No.2574 shall apply to this frequency band. The introduction of the service in relation to the broadcasting-satellite service in Region I shall follow the procedures specified in Article 7 or Appendix 30, with the applicable frequency band extended to cover 12.1-12-5 GHz.
- C19 The operation of low-power mobile or fixed communications equipment is permitted in the band but, this equipment must not cause interference to the Radionavigation-Satellite Service.
- C20 In Region 2, in the band 12.3-12.7 GHz, assignments to stations of the broadcasting-satellite service made available in the plan to be established by the 1983 regional administrative radio conference for Region 2 may also be used for transmissions in the fixed-satellite service (space-to-Earth), provided that such transmissions do not cause more interference or require more protection from interference than the broadcasting-satellite service transmissions operating in accordance with the plan. With respect to the space services, this band shall be used principally for the broadcasting-satellite service. The lower limit of this band shall be modified in accordance with the decisions of that conference for Region 2 (see No. 841).
- C21 (CAN-94) SUP (see C49 and C50)
- C22 In the band 164-168 GHz, all emissions are prohibited.
- C23 The bands 250-251 GHz and 262.24-262.76 GHz are also allocated to the radioastronomy service on a primary basis for spectral line observations.
- C24 In the band 250-252 GHz all emissions are prohibited.
- C25 The bands 4460-4540 MHz and 4900-4990 MHz are also allocated to the mobile service on a primary basis, for the exclusive use of the Government of Canada.
- C26 (CAN-94) In the band 148-149.9 MHz, applicants for a licence to provide mobile satellite service in Canada must demonstrate that they have adopted measures to avoid causing harmful interference to fixed and mobile services.
- C27 (CAN-94) In the band 1370-1400 MHz the fixed and mobile services must take into account existing and future high power radar systems.
- C28 (CAN-94) In the band 1452-1492, until at least 1 January 2000, the broadcasting-satellite service shall not cause harmful interference to the fixed service. After this date, the fixed service may continue to operate provided that it neither causes harmful interference to, nor is affected by the broadcasting satellite service beam assignments when the broadcasting-satellite service is implemented in Canada. This footnote will be reviewed prior to 1 January 2000.
- C29 (CAN-94) Existing fixed stations may continue to use the band 1452-1492 MHz provided they protect, and not claim protection from, stations operating in the broadcasting service which are in accordance with a domestic allotment plan.

- C30 (CAN-94) Stations in the broadcasting service shall be implemented in accordance with a domestic allotment plan which takes into account stations in the fixed service, to the extent possible.
- C31 (CAN-94) In the band 1515-1525 MHz, the use of the fixed service may be reduced to secondary upon implementation of the mobile-satellite service in Canada.
- C32 (CAN-94) In the band 1675-1700 MHz, up to 10 MHz of the mobile satellite allocation may be implemented, paired with the band 1515-1525 MHz and subject to No. 735A.
- C33 (CAN-94) In the bands 1670-1675 MHz and 1800-1805 MHz, the use of aeronautical public correspondence in accordance with NO. 740A may be the subject of a future policy review.
- C34 (CAN-94) The use of the bands 1429-1452 MHz, 1492-1525 MHz and 2010-2025 MHz by the mobile service is withheld.
- C35 (CAN-94) Existing fixed stations operating in the band 1850-1990 MHz will have priority over the mobile service until 1 July 1997. After this date, specific fixed stations will need to be displaced where necessary to enable the implementation of new mobile systems such as personal communications. The displacement of fixed stations as well as the implementation of new mobile systems will be governed by spectrum utilization policies.
- C35A (CAN-94) In the bands 1990-2010 MHz and 2110-2200 MHz, the implementation of the mobile service will be the subject of future policy review.
- C36 (CAN-94) In the bands 1970-2010 MHz and 2160-2200 MHz, the fixed service may become secondary to the mobile-satellite service in certain sub-bands as may be determined by future policy review.
- C37 (CAN-94) Station operators in the band 2400-2500 MHz should be aware of the potential interference from microwave ovens and licence-exempt low power radio devices, particularly in urban areas.
- C38 (CAN-94) In the band 2483.5-2500 MHz, the fixed service may be reduced to secondary status upon implementation of the mobile satellite service in Canada.
- C39 (CAN-94) The use of the bands 2500-2520 MHz and 2670-2690 MHz, by the mobile satellite service which was allocated at WARC-92, may be the subject of a future policy review for use in Canada after 2005.
- C40 (CAN-94) Feeder links to broadcasting-satellite (sound) space stations operating in the band 1452-1492 MHz shall be implemented in the band 7025-7075 MHz to the extent possible before a different fixed-satellite (Earth-to-space) band is so used. Use of the fixed-satellite (Earth-to-space) allocation in the 7025-7075 MHz band is limited to this application, except for general fixed-satellite use by inter-Regional fixed-satellite networks.
- C41 (CAN-94) In the use of the fixed-satellite service by networks that are used principally for domestic fixed-satellite applications, the band 13.75-14.0 GHz in the Earth-to-space direction shall be used in conjunction with the band 11.45-11.7 GHz in the space-to-Earth direction.
- C42 (CAN-94) The band 15.7-16.2 GHz is also allocated on a primary basis to the radionavigation service, the use of which is limited to Airport Surface Detection Equipment (ASDE).
- C43 (CAN-94) In the bands 17.3-17.8 GHz and 17.9-18.4 GHz the fixed-satellite service (Earth-to-space) is limited to feeder links to broadcasting-satellite space stations operating in the 12.2-12.7 GHz band (See C47).
- C44 (CAN-94) Feeder links to broadcasting-satellite space stations operating in the band 17.3-17.8 GHz shall be implemented in the band 24.75-25.25 GHz.

- (CAN-94) In the band 17.7-17.8 GHz Canadian stations in the fixed service shall not claim protection from and shall not cause harmful interference to Canadian domestic stations operating in the broadcasting-satellite service after 1 April 2007. In addition, to protect broadcasting-satellite receiving stations in Canada and in the United States, the aggregate power flux density from fixed systems of one country shall not be greater than -109 dB(W/m²) over any 1 MHz band in any area within the other country where the broadcasting-satellite service is used.
- C46 (CAN-94) In the band 17.7-17.8 GHz Canadian broadcasting-satellite space stations shall not radiate into territory of the United States administration a power flux density greater than that specified by ITU Regulation No. 2578. Similarly, to protect Canadian fixed systems, transmissions from broadcasting-satellite space stations of United States operators can be expected to be limited in the same way in Canadian territory.
- CAN-94) Feeder links to broadcasting-satellite systems operating in the 12.2-12.7 GHz band are limited to the band 17.3-17.8 GHz, unless it is necessary to use another band because of the operation or planned operation of a (downlink) broadcasting-satellite system in the 17.3-17.8 GHz band. The choice of which feeder-link band to use shall take into account the planned lifetime of the associated space-station. If for the above reason the band 17.3-17.8 is not available, either the band 17.9-18.4 GHz or the band 24.75-25.25 GHz shall be used. The choice between these latter two bands should take into account the need to coordinate the band 17.9-18.4 GHz with other primary services, and the need to use the band 24.75-25.25 GHz for the provision of feeder links to broadcasting-satellite systems operating in the band 17.3-17.8 GHz.
- C48 (CAN-94) Non-geostationary mobile-satellite systems that operate in frequency bands 1610-1626.5 MHz, 1970-2010 MHz, 2160-2200 MHz and 2483.5-2500 MHz shall use a portion of the frequency range 17.8-19.7 GHz in the space-to-Earth direction and a portion of the frequency range 27.0-29.5 GHz in the Earth-to-space direction for their feeder links, unless otherwise agreed with the Department.
- C49 (CAN-94) In the bands 7250-7750 MHz and 7900-8400 MHz, and in all or a portion of the bands 20.2-21.2 GHz, 30-31 GHz and 39.5-40.5 GHz as required, the fixed-satellite service is limited to use by the Government of Canada.
- C50 (CAN-94) In the bands 7250-7300 MHz, 7975-8025 MHz, and 43.5-45.5 GHz, and in all or a portion of the bands 20.2-21.2 GHz, 30-31 GHz and 39.5-40.5 GHz as required, the mobile-satellite service is limited to use by the Government of Canada.

**INDUSTRY CANADA** 

**RADIOCOMMUNICATION ACT** 

NOTICE NO. DGTP-005-94

Revisions to the Canadian Table of Frequency Allocations

This notice announces the adoption of a number of new frequency allocations for Canada in the release of a spectrum policy document entitled, "Revisions to the Canadian Table of Frequency Allocations (1994)".

In the Spring of 1993, Industry Canada initiated a comprehensive Spectrum Policy Review in part to take advantage of the new frequency allocations made by the 1992 World Administrative Radio Conference (WARC-92), in which Canada was an active participant and to accommodate the increasing demand for spectrum by existing and emerging radio services. Five public documents making proposals on specific spectrum allocation and utilization issues were released to provide the basis for wide public consultation. The documents proposed a series of spectrum allocation modifications to the Canadian Table for a number of frequency bands modified by WARC-92 in the spectrum range 3 MHz to 164 GHz.

Based on the extensive public comments received and findings from public meetings organized by industry, the Department is now issuing Revisions to the Canadian Table of Frequency Allocations (1994) to adopt the new international allocations with appropriate provisions to reflect the particular Canadian needs and radio applications. A complete revised edition of the Canadian Table of Frequency Allocations will be published early in next year and will be made available at associated book stores across Canada following the release of a notice announcing their availability for sale.

Copies of the subject document of this Notice are available from the Communications Branch, Industry Canada, 235 Queen Street, Ottawa, Ontario K1A 0H5, (613) 997-0380 or from its regional offices in Moncton, Montréal, Toronto, Winnipeg and Vancouver.

Dated at Ottawa, this 19th day of October, 1994.

Michael Helm Director General, Telecommunications Policy

### Frequency Bands Revised in the New Canadian Table

Band (kHz)		Band (MHz)		Band (GHz)
5900 - 5950 7300 - 7350 9400 - 9500 11600 - 11650 12050 - 12100 13570 - 13600 13800 - 13870 15600 - 15800 17480- 17550 18900 - 19020	137 - 138 148-149.9 149.9 - 150.05 216 - 220 312 - 315 387 - 390 400.15 - 401 410 - 420 806 - 890 890 - 902 902 - 928 929 - 942 942 - 956	1350 -1370 1370 - 1400 1429 - 1452 1452 - 1492 1492 - 1515 1515 - 1525 1525 - 1530 1530 - 1544 1544 - 1545 1545 - 1555 1555- 1559 1610.6 - 1613.8 1613.8 -1626.5 1626.5 - 1645.5 1646.5 - 1656.5 1656.5 - 1660 1670 - 1675 1675 - 1700	1710 -1850 1850 - 1970 1970 - 2010 2010 - 2025 2025 - 2110 2110 - 2120 2120 - 2160 2160 - 2200 2200 - 2290 2300 - 2450 2483.5-2500 2500 - 2596 2596 - 2655 2655 - 2686 2686 - 2690 5925 - 7075	10.7 - 11.45 11.45 - 11.7 12.2 - 12.7 13.75 - 14 15.7 - 16.6 17.3 - 17.7 17.7 - 17.8 17.8 - 18.1 18.1 - 18.4 18.4 - 19.7 19.7 - 20.2 21.2 - 22 22.21 - 22.5 22.55 - 22.55 22.55 - 23.55 23.55 - 23.6 24.45 - 24.65 24.65 - 24.75 24.75 - 25.25 25.25 - 27 27 - 29.5 29.5 - 30 31.8 - 32.3 34.2 - 34.7 37 - 38 38 - 40 40 - 40.5 74 - 84 156 - 158