

ANNEX 1

SUMMARY BY SERVICE
OF
FREQUENCY ALLOCATIONS FOR SPACE RADIOCOMMUNICATIONS

ANNEX 1

COMMUNICATION SATELLITE SERVICE

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
3400 - 4200	<u>Region 1</u> 3400 - 3600 FIXED MOBILE COMMUNICATION- <u>SATELLITE</u> (Satellite-to- earth)		<u>Region 1</u> 3400 - 3600 Radiolocation		In Denmark, Norway, Sweden and Switzerland the fixed, mobile, radiolocation and communication-satellite services operate on a basis of equality in the band 3400 - 3600 Mc/s. The band 3400 - 4200 Mc/s may also be used for tracking and telemetering signals associated with communication-satellite space stations operating in the same band. Footnotes 372 to 379 of the 1959 Radio Regulations apply.
	<u>Regions 2 & 3</u> 3400 - 3500 RADIOLOCATION COMMUNICATION- <u>SATELLITE</u> (Satellite-to- earth)		<u>Regions 2 & 3</u> 3400 - 3500 Amateur		
	<u>Region 2</u> 3500 - 3700 FIXED MOBILE RADIOLOCATION COMMUNICATION- <u>SATELLITE</u> (Satellite-to- earth)				
	<u>Region 3</u> 3500 - 3700 RADIOLOCATION COMMUNICATION- <u>SATELLITE</u> (Satellite-to- earth)		<u>Region 3</u> 3500 - 3700 Fixed Mobile		

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
3400 - 4200 (cont'd)	<u>Region 1</u> 3600 - 4200 FIXED <u>COMMUNICATION-</u> <u>SATELLITE</u> (Satellite-to- earth) <u>Regions 2 & 3</u> 3700 - 4200 FIXED MOBILE <u>COMMUNICATION-</u> <u>SATELLITE</u> (Satellite-to- earth)		<u>Region 1</u> 3600 - 4200 Mobile		
4400 - 4700	FIXED MOBILE <u>COMMUNICATION-</u> <u>SATELLITE</u> (Earth-to-satellite)				This band may also be used for telecomman- signals associated with communication- satellite earth stations operating in the same band.
5725 - 5850	<u>Region 1</u> RADIOLOCATION <u>COMMUNICATION-</u> <u>SATELLITE</u> (Earth-to-satellite) <u>Regions 2 & 3</u> RADIOLOCATION		Amateur		Footnote 391 of the 1959 Regulations designating 5800 Mc/s as an ISM frequency \pm 75 Mc/s still applies.
5850-5925	<u>Regions 1 & 3</u> FIXED MOBILE		<u>Region 3</u> Radiolocation		

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
5850-5925 (cont'd)	<u>Regions 1 & 3</u> (cont'd) <u>COMMUNICATION-</u> <u>SATELLITE</u> (Earth-to-satellite) <u>Region 2</u> RADIOLOCATION		<u>Region 2</u> Amateur		
5925 - 6425	FIXED MOBILE <u>COMMUNICATION-</u> <u>SATELLITE</u> (Earth-to-satellite)				This band may also be used for telecommand signals associated with communication-satellite earth stations operating in the same band.
7250-7300	<u>COMMUNICATION-</u> <u>SATELLITE</u> (Satellite-to-earth)				<p>This band may also be used for tracking and telemetering signals associated with communication-satellite space stations operating in the same band. Stations of the fixed and mobile services previously authorized in this band may continue to operate until 1 January 1969. In certain countries this band is also allocated to the fixed and mobile services.</p> <p>392D - As an exception, passive communication-satellite systems also may be accommodated in the band 7250 - 7750 Mc/s subject to:-</p> <p>(a) agreement between administrations concerned and those whose services, operating in accordance with the Table may be affected;</p> <p>(b) the co-ordination procedure laid down in Articles 9 and 9A.</p> <p>Such systems shall not cause any more interference at active earth station receivers than would be caused by fixed or mobile services.</p>

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
7250-7300 (cont'd)					<p>Power-flux density limitations at the earth's surface after reflection from the passive communication-satellites shall not exceed those prescribed in these Regulations for active communication-satellite systems.</p> <p>The maximum effective power radiated in any direction in the horizontal plane by earth stations of passive satellite systems shall not exceed + 55 db W, not taking the site shielding factor into account. If the distance between a transmitting station of a passive system and the territory of another administration exceeds 400 km., this limitation may be increased in that direction by 2 db for each 100 km. in excess of 400 km. up to a maximum of 65 db W.</p>
7300 - 7750	FIXED MOBILE <u>COMMUNICATION-</u> <u>SATELLITE</u> (Satellite-to-earth)				<p>This band may also be used for tracking and telemetering signals associated with communication-satellite space stations operating in the same band. In this band up to 100 Mc/s may be used on a primary basis by the meteorological satellite service.</p> <p>The provisions of 392D apply to this band.</p>
7900 - 7975	FIXED MOBILE <u>COMMUNICATION-</u> <u>SATELLITE</u> (Earth-to-satellite)				<p>This band may be used for telecommand signals associated with communication-satellite earth stations operating in the same band.</p>

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FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
7975 - 8025	<u>COMMUNICATION-</u> <u>SATELLITE</u> (Earth-to-satellite)				This band may be used for telecommand signals associated with communication-satellite earth stations operating in the same band. Stations of the fixed and mobile services previously authorized in this band may continue to operate until 1 January 1969. In certain countries this band is also allocated to the fixed and mobile services.
8025 - 8400	FIXED MOBILE <u>COMMUNICATION-</u> <u>SATELLITE</u> (Earth-to-satellite)				This band may be used for telecommand signals associated with communication-satellite earth stations operating in the same band. In Australia and the U.K. the band 8250 - 8400 Mc/s is allocated to the radiolocation and the communication-satellite services. In Israel, the band 8025 - 8400 Mc/s is allocated, on a primary basis, to the fixed and mobile services and, on a secondary basis, to the communication-satellite service.

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SPACE TELEMETERING AND TELECOMMAND

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FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
137 - 138	METEOROLOGICAL SATELLITE (Telemetering & Tracking) <u>SPACE (Telemetering & Tracking)</u>				In certain countries of region 1 this band is also allocated to the fixed and mobile services. In Australia this band is also allocated to the broadcasting service. The majority of countries in regions 1, 2 and 3 will cease fixed and mobile operations in this band by 1 January 1969.
146 - 149.9	<u>Region 1</u> FIXED MOBILE except aero- nautical mobile (R) <u>Regions 2 & 3</u> 146 - 148 AMATEUR 148 - 149.9 FIXED MOBILE				The frequencies 148.25 Mc/s \pm 15 kc/s and 154.2 Mc/s \pm 15 kc/s may be used for <u>space telecommand</u> subject to agreement among the administrations concerned and those having services operating in accordance with the Table, which may be affected.
154 - 156	<u>Region 1</u> FIXED MOBILE except aereo- nautical mobile (R) <u>Regions 2 & 3</u> 150.05 - 174 FIXED MOBILE				

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
267 - 272	FIXED MOBILE		<u>Space (Telemetering)</u>		Space stations employing frequencies in the band 267 - 273 Mc/s for telemetering may also transmit tracking signals in the band. In this band individual administrations may use space telemetering in their countries on a primary basis subject to agreement among those concerned.
272 - 273	FIXED MOBILE <u>SPACE (Telemetering)</u>				Space stations employing frequencies in the band 267 - 273 Mc/s for telemetering may also transmit tracking signals in the band.
401 - 402	METEOROLOGICAL AIDS <u>SPACE (Telemetering)</u>		Fixed Mobile except aeronautical mobile		In the U.K. this band is also allocated to the radiolocation service on a secondary basis. In France this band is allocated to the meteorological aids service. In Australia the space (telemetering) service in this band is a secondary service. In certain countries of region 1 this band is allocated to the fixed and mobile services on a primary basis.
440 - 450	<u>Region 1</u> FIXED MOBILE except aeronautical mobile <u>Regions 2 & 3</u> RADIOLOCATION		<u>Region 1</u> Radiolocation <u>Regions 2 & 3</u> Amateur		The band 449.75 - 450.25 Mc/s may be used for <u>space telecommand</u> , subject to agreement among the administrations concerned and those having services operating in accordance with the Table, which may be affected.
450 - 460	FIXED MOBILE				

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
1427 - 1429	FIXED MOBILE except aero- nautical mobile <u>SPACE (Telecommand)</u>				No change from 1959 allocation with exception that these frequencies designated for telecommand purposes.
1525 - 1535	<u>Regions 1 & 3</u> FIXED <u>SPACE (Telemetry)</u> <u>Region 2</u> <u>SPACE (Telemetry)</u>		<u>Region 1</u> Mobile except aero- nautical mobile <u>Region 2</u> Fixed Mobile <u>Region 3</u> Mobile		Space stations employing frequencies in the band 1525 - 1540 Mc/s for telemetry may also transmit tracking signals in this band. In Cuba and certain countries of region 1 the mobile service is a primary service. A resolution was adopted inviting administrations to modify the category of the fixed and mobile services from primary to secondary as soon as possible.
1535 - 1540	<u>SPACE (Telemetry)</u>				Space stations employing frequencies in the band 1525 - 1540 Mc/s for telemetry may also transmit tracking signals in this band. In certain countries of region 1 this band is also allocated to the fixed and mobile services. The above resolution also applies to the band 1535 - 1540 Mc/s.
1790 - 2290	<u>Region 1</u> FIXED <u>Regions 2 & 3</u> FIXED MOBILE		<u>Region 1</u> Mobile		The band 2110 - 2120 Mc/s may be used for <u>telecommand</u> in conjunction with spacecraft engaged in deep space research, subject to agreement with those administrations concerned or affected.
3400 - 4200	FOR ALLOCATIONS SEE	COMMUNICATION-SATELLITE SERVICE			These bands may also be used for the transmission of <u>tracking</u> and <u>telemetry</u> signals associated with communication-satellite space stations operating in the same bands.

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FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
4400 - 4700	FIXED MOBILE COMMUNICATION- SATELLITE (Earth-to-satellite)				This band may also be used for the transmission of <u>telecommand</u> signals associated with communication-satellite earth stations operating in the same band.
5725 - 6425	FOR ALLOCATIONS SEE	COMMUNICATION-SATELLITE SERVICE			The bands allocated to the communication-satellite service may also be used for the transmission of <u>telecommand</u> signals associated with communication-satellite earth stations operating in the same band.
6425 - 7250	FIXED MOBILE				The band 7120 - 7130 may be used for <u>telecommand</u> in association with space services, subject to agreement between the administrations concerned and those having services operating in accordance with the Table, which may be affected.
7250 - 7750	FOR ALLOCATIONS SEE	COMMUNICATION-SATELLITE SERVICE			These bands may also be used for the transmission of <u>tracking</u> and <u>telemetry</u> signals associated with communication-satellite space stations operating in the same bands.
7900 - 8400	FOR ALLOCATIONS SEE	COMMUNICATION-SATELLITE SERVICE			These bands may also be used for the transmission of <u>telecommand</u> signals associated with communication-satellite earth stations operating in the same bands.

SPACE RESEARCH SERVICE

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FREQUENCY BAND Kc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
9995 - 10005	STANDARD FREQUENCY			<u>Space Research</u>	May be used by the radio astronomy service. The space research footnote is an editorial change only.
15762 - 15768	FIXED		<u>Space Research</u>		In certain countries the space research service is a primary service.
18030 - 18036	FIXED		<u>Space Research</u>		In certain countries the space research service is a primary service.
19990 - 20010	STANDARD FREQUENCY			<u>Space Research</u>	May be used by the radio astronomy service. The space research footnote is an editorial change only. The frequency 20007 kc/s \pm 3 kc/s may also be used, in emergency, in the search for, and rescue of, astronauts and space vehicles.
<u>Mc/s</u> 30.005 - 30.010	FIXED MOBILE <u>SPACE RESEARCH</u> SPACE (Satellite Identification)				
39.986 - 40.002	STANDARD FREQUENCY			<u>Space Research</u>	May be used by the radio astronomy service. The space research footnote is an editorial change only.

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
136 - 137	<u>Regions 1 & 3</u> FIXED MOBILE <u>SPACE RESEARCH</u> (Telemetry & Tracking) <u>Region 2</u> <u>SPACE RESEARCH</u> (Telemetry & Tracking)				In Region 2 fixed and mobile services may continue to operate until January 1, 1969. In Cuba this band also allocated to the fixed and mobile services. Recommendation No. 7A recommends protection to the space research service and the cessation of fixed and mobile operations as soon as possible.
137 - 138	METEOROLOGICAL SATELLITE <u>SPACE RESEARCH</u> (Telemetry & Tracking) SPACE (Telemetry & Tracking)				In certain countries of Region 1 this band is also allocated to the fixed and mobile services. The majority of countries in Regions 1, 2 and 3 will cease fixed and mobile operations in this band by January 1, 1969.
143.6 - 143.65	<u>Region 1</u> AERONAUTICAL MOBILE (OR) <u>SPACE RESEARCH</u> (Telemetry & Tracking) <u>Region 2</u> FIXED MOBILE <u>SPACE RESEARCH</u> (Telemetry & Tracking) RADIOLOCATION (Permitted)				

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
143.6 - 143.65 (cont'd)	<u>Region 3</u> FIXED MOBILE <u>SPACE RESEARCH</u> (Telemetry & Tracking)				
183.1 - 184.1	FIXED MOBILE BROADCASTING			<u>Space Research</u>	Editorial change only.
400.05 - 401	METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE (Maintenance Tele- metering) <u>SPACE RESEARCH</u> (Telemetry & Tracking)				In certain countries this band is also allocated to the fixed and mobile services. In the U.K. this band is also allocated to the radiolocation service on a secondary basis.
900 - 960	890 - 942 <u>Region 1</u> FIXED BROADCASTING <u>Region 2</u> FIXED RADIOLOCATION <u>Region 3</u> FIXED MOBILE BROADCASTING		<u>Regions 1 & 3</u> Radiolocation	<u>Space Research</u>	

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
900 - 960 (cont'd)	942 - 960 <u>Region 1</u> FIXED BROADCASTING <u>Region 2</u> FIXED <u>Region 3</u> FIXED MOBILE BROADCASTING				
1700 - 1710	<u>Region 1</u> FIXED SPACE RESEARCH (Telemetry & Tracking) <u>Region 2</u> SPACE RESEARCH (Telemetry & Tracking) <u>Region 3</u> FIXED MOBILE SPACE RESEARCH (Telemetry & Tracking)		<u>Region 1</u> Mobile		Status of space research raised from secondary to primary. In Cuba this band is also allocated to the fixed and mobile services.
2290 - 2300	<u>Region 1</u> FIXED SPACE RESEARCH (Telemetry & Tracking in deep space)		<u>Region 1</u> Mobile		In Cuba this band is also allocated to the fixed and mobile services.

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
2290 - 2300 (cont'd)	<u>Region 2</u> SPACE RESEARCH (Telemetry & Tracking in deep space) <u>Region 3</u> FIXED MOBILE SPACE RESEARCH (Telemetry & Tracking in deep space)				
5250 - 5255	RADIOLOCATION		<u>Space Research</u>		
5670 - 5725	RADIOLOCATION		Amateur <u>Space Research</u> (Deep Space)		In certain countries the space research service is a primary service in the band 5670 - 5725 Mc/s.
8400 - 8500	<u>Regions 1 & 3</u> FIXED MOBILE SPACE RESEARCH <u>Region 2</u> SPACE RESEARCH				In Australia and the U.K. this band is also allocated to the radio-location service. In certain countries the allocation to the space research service is on a secondary basis. In Cuba this band is also allocated to the fixed and mobile services.
<u>Gc/s</u> 15.25 - 15.35	<u>SPACE RESEARCH</u>				In certain countries this band is also allocated to the fixed and mobile services and in some other countries the band is also allocated to the fixed and mobile services on a secondary basis.

FREQUENCY BAND Gc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
31 - 31.3	FIXED MOBILE		<u>Space Research</u>		In certain countries the space research service is a primary service in the band 31 - 31.3 Gc/s.
31.5 - 31.8	<u>SPACE RESEARCH</u>		<u>Regions 1 & 3</u> Fixed Mobile		In Cuba the band 31.5 - 31.8 Gc/s is also allocated, on a secondary basis, to the fixed and mobile services.
31.8 - 32.3	RADIONAVIGATION		<u>Space Research</u>		In certain countries the space research service is a primary service in the band 31.8 - 32.3 Gc/s.
34.2 - 35.2	RADIOLOCATION		<u>Space Research</u>		In certain countries this band is also allocated to the fixed and mobile services and the space research service is a primary service.

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RADIO ASTRONOMY SERVICE

FREQUENCY BAND Mc/e	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
37.75 - 38.25	FIXED MOBILE		<u>Radio Astronomy</u>		Status of radio astronomy raised from recommendation to secondary service.
73 - 74.6	<u>Region 2 only</u> <u>RADIO ASTRONOMY</u>				In region 2, fixed, mobile and broadcasting service operations previously authorized in this band may continue to operate on a non-interference basis to the radio astronomy service. In Cuba, this band is also allocated to the fixed, mobile and broadcasting services.
150.05 - 153	<u>Region 1</u> 150.05 - 151 FIXED MOBILE except aeronautical mobile (R) 151 - 154 FIXED MOBILE except aeronautical mobile (R) METEOROLOGICAL AIDS (Permitted) <u>Regions 2 & 3</u> 150.05 - 170 FIXED MOBILE	<u>Region 1</u> 150.05 - 153 <u>RADIO ASTRONOMY</u>			In region 1, the band 150.05 - 153 Mc/s is also allocated to the radio astronomy service. In the U.K. the band 150.05 - 151 Mc/s is allocated to the radio astronomy service and the band 151 - 153 Mc/s is allocated to the radio astronomy service on a primary basis and to the meteorological aids service on a secondary basis.

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
322 - 329	FIXED MOBILE				No change in footnote 310 wherein Administrations are reminded that radio astronomy observations are carried out in this band by a number of countries.
404 - 410	404 - 406 METEOROLOGICAL AIDS 406 - 410 FIXED MOBILE except aeronautical mobile		404 - 406 Fixed Mobile except aeronautical mobile		Footnote 317 modified to read:- The band 404 - 410 Mc/s in region 2 and the band 406 - 410 Mc/s in regions 1 and 3 are also allocated to the radio astronomy service.
606 - 614	<u>Regions 1 & 2</u> BROADCASTING <u>Region 3</u> 606 - 610 RADIONAVIGATION 610 - 614 FIXED MOBILE BROADCASTING				In the African Broadcasting area the band 606 - 614 Mc/s is allocated to the radio astronomy service. In region 1, except the African Broadcasting area, the band 606 - 614 Mc/s and in region 3 the band 610 - 614 Mc/s may be used by the radio astronomy service. In region 2 the band 608 - 614 Mc/s is reserved exclusively for the radio astronomy service until the first Administrative Radio Conference after January 1, 1974, which is competent to review this provision; however, this provision does not apply to Cuba.
1400 - 1427	<u>RADIO ASTRONOMY</u>				Footnote 350 deleted.
1664.4 - 1668.4	METEOROLOGICAL AIDS METEOROLOGICAL SATELLITE		<u>Radio Astronomy</u>		In certain countries this band is also allocated to the fixed and mobile services except the aeronautical mobile service. In some other countries this band is also allocated on a secondary basis to the fixed and mobile services except the aeronautical mobile service.

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
2690 - 2700	<u>RADIO ASTRONOMY</u>				In the F.R. of Germany this band is also allocated to the fixed service. In certain other countries this band is also allocated to the fixed and mobile services.
4990 - 5000	<u>Regions 1 & 3</u> FIXED MOBILE <u>RADIO ASTRONOMY</u> <u>Region 2</u> <u>RADIO ASTRONOMY</u>				In Cuba this band is also allocated to the fixed and mobile services.
<u>Gc/s</u> 10.68 - 10.7	<u>RADIO ASTRONOMY</u>				In Australia and the U.K. the band 10.68 - 10.7 Gc/s is also allocated on a secondary basis to the radiolocation service. In certain countries the band 10.68 - 10.7 Gc/s is also allocated to the fixed and mobile services.
15.35 - 15.4	<u>RADIO ASTRONOMY</u>				In certain countries this band is also allocated to the fixed and mobile services.
19.3 - 19.4	<u>RADIO ASTRONOMY</u>				In certain countries this band is also allocated to the fixed and mobile services.
31.3 - 31.5	<u>RADIO ASTRONOMY</u>				In certain countries this band is also allocated to the fixed and mobile services.

FREQUENCY BAND Gc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
33 - 33.4	<u>Region 1</u> RADIO ASTRONOMY RADIONAVIGATION				In Cuba and India this band is also allocated to the radio astronomy service.
33.4 - 34.2	RADIOLOCATION				In certain countries this band is also allocated to the radio astronomy service.
36 - 40	FIXED MOBILE				In certain countries the band 36.5 - 37.5 Gc/s is also allocated to the radio astronomy service.

RADIONAVIGATION SATELLITE SERVICE

FREQUENCY BAND Mc/e	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
149.9 - 150.05	<u>RADIONAVIGATION SATELLITE</u>				Stations operating in the fixed and mobile services may continue to use these bands until 1 January 1969. In certain countries the fixed and mobile services will continue to have equal primary status with the radionavigation service.
399.9 - 400.05	<u>RADIONAVIGATION SATELLITE</u>				
14.3 - ^{Gc/s} 14.4	<u>RADIONAVIGATION SATELLITE</u>				

METEOROLOGICAL SATELLITE SERVICE

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
137 - 138	<u>METEOROLOGICAL SATELLITE</u> SPACE RESEARCH (Telemetry & Tracking) SPACE (Telemetry & Tracking)				In certain countries this band is also allocated to the fixed and mobile services. In Australia this band is allocated to the broadcasting service. In some other countries this band is also allocated to the aeronautical mobile (OR) service. The majority of countries in all regions will cease fixed and mobile operations by January 1, 1969.
400.05 - 401	METEOROLOGICAL AIDS <u>METEOROLOGICAL SATELLITE</u> (Maintenance tele- metering) SPACE RESEARCH (Telemetry & Tracking)				In certain countries this band is also allocated to the fixed and mobile services. In the U.K. this band is also allocated to the radiolocation service on a secondary basis.
460 - 470	FIXED MOBILE		<u>Meteorological Satellite</u>		In certain countries this band may be used on a primary basis by the meteorological satellite service subject to agreement among those concerned or affected.
1660 - 1664.4	METEOROLOGICAL AIDS <u>METEOROLOGICAL SATELLITE</u>				In certain countries this band is also allocated to the fixed and mobile services. In some countries this band is also allocated, on a secondary basis, to the fixed and mobile services. The location of earth stations operating in this band is subject to agreement among those concerned, or affected.

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
1664.4 - 1670...	<u>METEOROLOGICAL AIDS</u> <u>METEOROLOGICAL</u> <u>SATELLITE</u>		1664.4 - 1668.4 Radio Astronomy		In certain countries this band is also allocated to the fixed and mobile services. In some countries this band is also allocated, on a secondary basis, to the fixed and mobile services. The location of earth stations operating in this band is subject to agreement among those concerned, or affected.
1690 - 1700	<u>METEOROLOGICAL AIDS</u> <u>METEOROLOGICAL</u> <u>SATELLITE</u>		<u>Region 1</u> Fixed Mobile except aero- nautical mobile.		In certain countries this band is also allocated to the fixed and mobile services. The location of earth stations operating in this band is subject to agreement among those concerned or affected.
1770 - 1790	<u>Region 1</u> FIXED <u>Regions 2 & 3</u> FIXED MOBILE		<u>Meteorological</u> <u>Satellite</u> <u>Region 1</u> Mobile		In certain countries the meteorological satellite service in the band 1770 - 1790 Mc/s shall be on a primary basis subject to agreement among those concerned or affected.
6425 - 7250	FIXED MOBILE				In the bands 7200 - 7250 and 7300 - 7750 Mc/s, the meteorological satellite service may use a band up to 100 Mc/s in width on a primary basis. These bands may also be used for the transmission of tracking and telemetering signals associated with meteorological satellite space stations operating in the same band.
7250 - 7300	COMMUNICATION- SATELLITE (Satellite-to- earth)				
7300 - 7750	FIXED MOBILE COMMUNICATION- SATELLITE (Satellite-to- earth)				

FREQUENCY BAND Mc/s	PRIMARY ALLOCATION		SECONDARY ALLOCATION		IMPORTANT FOOTNOTES AND COMMENTS
	TABLE STATUS	FOOTNOTE STATUS	TABLE STATUS	FOOTNOTE STATUS	
9800 - 10000	RADIOLOCATION		Fixed		The band 9975 - 10025 Mc/s may be used by weather radar on meteorological satellites.
10000 - 10500	RADIOLOCATION		Amateur		
<u>Gc/s</u> 34.2 - 35.2	RADIOLOCATION		Space Research		The band 34.4 - 34.5 Gc/s may be used by weather radar devices on meteorological satellites for the detection of cloud.

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AERONAUTICAL MOBILE (R) AND AERONAUTICAL RADIONAVIGATION SERVICES.

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FREQUENCY BAND Mc/s	REGION 1	REGION 2	REGION 3	FOOTNOTES AND COMMENTS
117.975 - 132	AERONAUTICAL MOBILE (R)			<p>273A - In the band 117.975-132 Mc/s and in the band 132-136 Mc/s where the aeronautical mobile (R) service is authorized, the use and development, for this service, of systems using space communication techniques may be authorized but limited initially to satellite relay stations of the aeronautical mobile (R) service. Such use and development shall be subject to co-ordination between administrations concerned and those having services operating in accordance with the Table, which may be affected.</p>
132 - 136	AERONAUTICAL MOBILE (R)	FIXED MOBILE		
<p>1540 - 1660 4200 - 4400 5000 - 5250 <u>Gc/s</u> 15.4 - 15.7</p>	AERONAUTICAL RADIONAVIGATION			<p>352A - The bands 1540-1660 Mc/s, 4200-4400 Mc/s, 5000-5250 Mc/s and 15.4-15.7 Gc/s are reserved, on a world-wide basis, for the use and development of airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities.</p> <p>352B - The bands 1540-1660 Mc/s, 5000-5250 Mc/s and 15.4-15.7 Gc/s are also allocated to the aeronautical mobile (R) service for the use and development of systems using space communication techniques. Such use and development is subject to agreement and co-ordination between administrations concerned and those having services operating in accordance with the Table, which may be affected.</p>

PROVISIONS FOR THE USE OF SPACE TECHNIQUES BY OTHER SERVICES.

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FREQUENCY BAND kc/s	REGION 1	REGION 2	REGION 3	FOOTNOTES AND COMMENTS
19990 - 20010	STANDARD FREQUENCY			The frequency 20007 kc/s may also be used in emergency, in the search for, and rescue of, astronauts and space vehicles. Emissions must be confined in a band of ± 3 kc/s about this frequency.
<u>Mc/s</u> 30.005 - 30.010	FIXED MOBILE SPACE RESEARCH <u>SPACE (Satellite identification)</u>			
144 - 146	AMATEUR			In the band 144 - 146 Mc/s, artificial satellites may be used by the Amateur Service.

IMPACT ON CANADIAN FREQUENCY USAGE

ANNEX 2

1.

FREQUENCY BAND Mc/s	SERVICE AFFECTED	SUGGESTED ACTION
73.0 - 74.6	Fixed Mobile	<p>This band formerly allocated to the fixed, mobile and broadcasting services and is now allocated on an exclusive basis in Region 2 to the radio astronomy service with the exception that in Cuba this band is also allocated to the fixed, mobile and broadcasting services.</p> <p>In Region 2, fixed, mobile and broadcasting service operations previously authorized in the band 73 - 74.6 Mc/s may continue to operate on a non-interference basis to the radio astronomy service.</p> <p>No further assignments should be made to stations in the fixed and mobile services operating in this band.</p>
136 - 138	Fixed Mobile	<p>After January 1, 1969, this band will be allocated to the Space radio services on an exclusive basis, therefore, no further assignments should be made to stations in the fixed and mobile services.</p> <p>Existing fixed and mobile services will have to vacate the band by January 1, 1969, however, it may be more appropriate to select replacement frequencies as soon as possible.</p>
144 - 146	Amateur	<p>No change in allocation, however, footnote 284 A provides that; "In the band 144 - 146 Mc/s artificial satellites may be used by the amateur service". Therefore, it will have to be decided if Canadian amateurs will be permitted to use artificial satellites in this band.</p>
149.9 - 150.05	Fixed Mobile	<p>After January 1, 1969, this band will be allocated to the radionavigation satellite service on an exclusive basis, therefore, no further assignments should be made to stations in the fixed and mobile services.</p> <p>Existing fixed and mobile services will have to vacate the band by January 1, 1969, however, it may be more appropriate to select replacement frequencies as soon as possible.</p>
399.9 - 400.05	Fixed Mobile	<p>After January 1, 1969, this band will be allocated to the radionavigation satellite service on an exclusive basis, therefore, no further assignments should be made to stations in the fixed and mobile services.</p> <p>Existing fixed and mobile services will have to vacate the band by January 1, 1969, however, it may be more appropriate to select replacement frequencies, if required, as soon as possible.</p>

ANNEX 2

FREQUENCY BAND Mc/s	SERIVCE AFFECTED	SUGGESTED ACTION
608 - 614	Broadcasting	<p>In Region 2 this band will be reserved exclusively for the radio astronomy service until after January 1, 1974 when the allocation will be reviewed, this provision does not apply to Cuba.</p> <p>Proposed assignments of channel 37 in Canada will require replacement frequencies. This has already been studied by the section responsible for the assignment of TV channels and will now require further action on their part.</p>
1525 - 1535	Mobile	<p>This band was formerly allocated to the mobile service on a primary basis with the fixed service as secondary. The Space (Telemetry) service is now the primary service with both fixed and mobile as the secondary services. This is for information only.</p>
1535 - 1540	Aeronautical Radionavigation	<p>This band was formerly allocated to the Aeronautical Radionavigation service, however, it is now allocated on an exclusive basis to the Space (Telemetry) service. Therefore, the Aeronautical Radionavigation service will vacate this band by January 1, 1965.</p>
1660 - 1670 1690 - 1700	Fixed Mobile	<p>These bands were formerly allocated to the fixed and mobile services on a primary basis and are now allocated to the Meteorological Aids and Meteorological Satellite services with the portion 1664.4 - 1668.4 Mc/s being allocated on a secondary basis to Radio Astronomy. Fixed and mobile services will vacate these bands by January 1, 1965.</p>
1700 - 1710 2290 - 2300	Fixed Mobile	<p>These bands were formerly allocated to the fixed and mobile services on a primary basis and are now allocated on an exclusive basis to the Space Research service. Therefore, the fixed and mobile services will have to vacate these bands by January 1, 1965.</p>
2690 - 2700	Fixed Mobile	<p>This band was formerly allocated to the fixed and mobile services on a primary basis and is now allocated on an exclusive basis to the Radio Astronomy service. Therefore, the fixed and mobile services will have to vacate this band by January 1, 1965.</p>
4990 - 5000	Fixed Mobile	<p>This band was formerly allocated to the fixed and mobile services and is now allocated on an exclusive basis to the Radio Astronomy service. Therefore, the fixed and mobile services will have to vacate this band by January 1, 1965.</p>

FREQUENCY BAND Mc/s	SERVICE AFFECTED	SUGGESTED ACTION
7250 - 7300 7975 - 8025	Fixed Mobile	<p>After January 1, 1969, these bands will be allocated to the Communication Satellite service on an exclusive basis, therefore, no further assignments should be made to stations in the fixed and mobile services.</p> <p>Existing fixed and mobile services will have to vacate these bands by January 1, 1969, however, it may be more appropriate to select replacement frequencies as soon as possible.</p>
8400 - 8500	Fixed Mobile	This band was formerly allocated to the fixed and mobile services on a primary basis and is now allocated on an exclusive basis to the Space Research service. Therefore, the fixed and mobile services will have to vacate this band by January 1, 1965.
Gc/s 10.68 - 10.7	Fixed Mobile	This band was formerly allocated to the fixed and mobile services and is now allocated on an exclusive basis to the Radio Astronomy service. Therefore, the fixed and mobile services will have to vacate this band by January 1, 1965.
14.3 - 14.4	Radionavigation	This band was formerly allocated to the radionavigation service and is now allocated on an exclusive basis to the Radionavigation Satellite service. Therefore, the radionavigation service will have to vacate this band by January 1, 1965.
15.25 - 15.35	Fixed Mobile	This band was formerly allocated to the fixed and mobile services and is now allocated on an exclusive basis to the Space Research service. Therefore, the fixed and mobile services will have to vacate this band by January 1, 1965.
15.35 - 15.4 19.3 - 19.4 31.3 - 31.5	Fixed Mobile	These bands were formerly allocated to the fixed and mobile services and are now allocated on an exclusive basis to the Radio Astronomy service. Therefore, the fixed and mobile services will have to vacate these bands by January 1, 1965.
31.5 - 31.8	Fixed Mobile	This band was formerly allocated to the Space service on a primary basis and on a secondary basis to the fixed and mobile services and is now allocated on an exclusive basis to the Space Research service. Therefore, the fixed and mobile services will have to vacate this band by January 1, 1965.