تصدر عن وزارة شئون الإعلام
مملكة البحرين

المراسلات

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وزارة شئون الإعلام
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البريد الإلكتروني:

officialgazette@iaa.gov.bh

الاشتراكات

قسم التوزيع

وزارة شئون الإعلام

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المنامة–مملكة البحرين

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محتويات العدد

تعميم بشأن
ساعات الدوام الرسمي
خلال شهر رمضان المبارك لعام ١٤٣٨هـ

خلال شهر رمضان المبارك لعام ١٤٣٨هـ يكون الدوام الرسمي في وزارات المملكة وهيئاتها ومؤسساتها العامة من الساعة الثامنة صباحاً إلى الساعة الثانية بعد الظهر.

رئيس مجلس الوزراء
خليفة بن سلمان آل خليفة

صدر بتاريخ: ٢٨ شعبان ١٤٣٨هـ
الموافق: ٢٤ مايو ٢٠١٧م

وزارة العدل والشئون الإسلامية والأوقاف

قرار رقم (٢٨) لسنة ٢٠١٧
بشأن تعديل جدول دوائر هيئة فرْز الأملاك
المرافق للقرار رقم (٦٩) لسنة ٢٠١٥
بشأن إعادة تنظيم هيئة فرْز الأملاك

وزير العدل والشئون الإسلامية والأوقاف:

بعد الاطلاع على القرار رقم (٦٩) لسنة ٢٠١٥ بشأن إعادة تنظيم هيئة فرْز الأملاك، المعدَّل بالقرار رقم (٩٩) لسنة ٢٠١٥،

وبناءً على عرْض وكيل الوزارة لشئون العدل،

قرر الآتي:

المادة الأولى

يُستبدل بتشكيل الدائرة الثالثة لهيئة فرْز الأملاك الوارد بجدول دوائر هيئة فرْز الأملاك المرافق للقرار رقم (٦٩) لسنة ٢٠١٥ بشأن إعادة تنظيم هيئة فرْز الأملاك، التشكيل الآتي:

الدائرة الثالثة:

١- فراس عباس أمين، رئيساً.

٢- الدكتور/ مناف يوسف حمزة، نائباً للرئيس.

٣- محمد حسن الجار.

٤- أنوار فلاح البنفلاح.

المادة الثانية

على وكيل الوزارة لشئون العدل تنفيذ هذا القرار، ويعمل به من تاريخ صدوره، وينشر في الجريدة الرسمية.

وزير العدل
والشئون الإسلامية والأوقاف
خالد بن علي بن عبدالله آل خليفة

صدر بتاريخ: ٢٩ شعبان ١٤٣٨هـ
الموافـــق: ٢٥ مايـــو ٢٠١٧م

وزارة العدل والشئون الإسلامية والأوقاف

قرار رقم (٢٩) لسنة ٢٠١٧
بشأن تخويل بعض موظفي إدارة وسائل الإعلام
بوزارة شئون الإعلام صفة مأموري الضَّبْط القضائي

وزير العدل والشئون الإسلامية والأوقاف:

بعد الاطلاع على قانون الإجراءات الجنائية الصادر بالمرسوم بقانون رقم (٤٦) لسنة ٢٠٠٢ وتعديلاته، وعلى الأخص المادة (٤٥) منه،

وعلى المرسوم بقانون رقم (٤٧) لسنة ٢٠٠٢ بشأن تنظيم الصحافة والطباعة والنشر، وعلى الأخص المادة (٩٢) منه،

وعلى القانون رقم (٢٢) لسنة ٢٠٠٦ بشأن حماية حقوق المؤلف والحقوق المجاورة وتعديلاته، وعلى الأخص المادة (٦٧) منه،

وعلى القرار رقم (٤٠) لسنة ٢٠١٢ بشأن تخويل بعض موظفي إدارة المطبوعات والنشر بوزارة الإعلام صفة مأموري الضَّبْط القضائي،

وبناءً على الاتفاق مع وزير شئون الإعلام،

قرر الآتي:

المادة الأولى

يُخوَّل موظفو إدارة وسائل الإعلام بوزارة شئون الإعلام التالية أسماؤهم صفة مأموري الضَّبْط القضائي بالنسبة للجرائم التي تقع بدوائر اختصاصهم، بالمخالفة لأحكام المرسوم بقانون رقم (٤٧) لسنة ٢٠٠٢ بشأن تنظيم الصحافة والطباعة والنشر، والقانون رقم (٢٢) لسنة ٢٠٠٦ بشأن حماية حقوق المؤلف والحقوق المجاورة، والقرارات التي تصدر تنفيذاً لهما، وهم:

١- يوسف محمد إسماعيل.

٢- خليل عبدالرحمن القاسمي.

٣- رياض أحمد خميس.

٤- محمد عبدالسلام الجازي.

٥- عيسى حسن الخياط.

٦- وليد عبدالله أحمد.

٧- أحمد عبدالوهاب كيكسو.
٨- بدر محمد العمادي.
٩- غادة إرحمة الذوادي.
١٠- دانة علي بوجيري.
١١- مريم عمران العمران.

المادة الثانية

يُلغى القرار رقم (٤٠) لسنة ٢٠١٢ بشأن تخويل بعض موظفي إدارة المطبوعات والنشر بهيئة شئون الإعلام صفة مأموري الضَّبْط القضائي.

المادة الثالثة

يُنشر هذا القرار في الجريدة الرسمية، ويُعمل به من اليوم التالي لتاريخ نشره.

وزير العدل
والشئون الإسلامية والأوقاف
خالد بن علي بن عبدالله آل خليفة

صدر بتاريخ: ٢١ شـــعبان ١٤٣٨هـ
المـــوافـــق: ١٧ مـايـــو ٢٠١٧م

وزارة العدل والشئون الإسلامية والأوقاف

قرار رقم (٣٠) لسنة ٢٠١٧
بشأن تخويل بعض موظفي وزارة المواصلات والاتصالات صفة مأموري الضَّبْط القضائي

وزير العدل والشئون الإسلامية والأوقاف:

بعد الاطلاع على قانون الإجراءات الجنائية الصادر بالمرسوم بقانون رقم (٤٦) لسنة ٢٠٠٢ وتعديلاته، وعلى الأخص المادة (٤٥) منه،

وعلى قانون المرور الصادر بالقانون رقم (٢٣) لسنة ٢٠١٤، وعلى الأخص المادة ١٨ منه،

وبعد الاتفاق مع وزير المواصلات والاتصالات،

قرر الآتي:

المادة الأولى

يُخَوَّل موظفو وزارة المواصلات والاتصالات التالية أسماؤهم، صفة مأموري الضَّبْط القضائي وذلك بالنسبة للجرائم التي تقع في دوائر اختصاصهم، بالمخالفة لأحكام الفصل الثاني من قانون المرور الصادر بالقانون رقم (٢٣) لسنة ٢٠١٤، وهم:

١- دعاء جاسم محسن.

٢- مريم أحمد حميدان.

٣- إلهام يوسف زيد.

٤- حسين سعيد الشارقي.

٥- حسين عبدالكريم البستكي.

المادة الثانية

يُنشر هذا القرار في الجريدة الرسمية، ويُعمل به من اليوم التالي لتاريخ نشره.

وزير العدل
والشئون الإسلامية والأوقاف
خالد بن علي بن عبدالله آل خليفة

صدر بتاريخ: ٢١ شعبان ١٤٣٨هـ

الموافق: ١٧ مايو ٢٠١٧م

وزارة العدل والشئون الإسلامية والأوقاف

قرار رقم (٣١) لسنة ٢٠١٧
بتعديل القرار رقم (٥٤) لسنة ٢٠١٦ بشأن تعديل الرسوم القضائية

وزير العدل والشئون الإسلامية والأوقاف:

بعد الاطلاع على قانون المرافعات المدنية والتجارية الصادر بالمرسوم بقانون رقم (١٢) لسنة ١٩٧١ وتعديلاته،

وعلى المرسوم بقانون رقم (٣) لسنة ١٩٧٢ بشأن الرسوم القضائية وتعديلاته، والجداول المرفقة،

وعلى القرار رقم (٢٦) لسنة ١٩٨٨ بشأن تعديل الرسوم القضائية وتعديلاته،

وعلى القرار رقم (٥٤) لسنة ٢٠١٦ بشأن تعديل الرسوم القضائية،

وبناءً على عرْض وكيل الوزارة لشئون العدل،

وبعد موافقة مجلس الوزراء،

قرر الآتي:

المادة الأولى

يُستبدَل بنص البند (أ) من المادة (٩) من القرار رقم (٥٤) لسنة ٢٠١٦ بشأن تعديل الرسوم القضائية النص الآتي:

"**المادة (٩) البند (أ):**

يُفرَض رسْم ثابت قدره عشرون ديناراً في حالة الرجوع إلى الدعوى بعد القرار فيها بالشطب، بشرط ألا يتغير موضوعها أو أطراف الخصومة فيها."

المادة الثانية

على وكيل الوزارة لشئون العدل تنفيذ هذا القرار، ويعمل به اعتباراً من اليوم التالي لتاريخ نشره في الجريدة الرسمية.

وزير العدل
والشئون الإسلامية والأوقاف
خالد بن علي بن عبدالله آل خليفة

صدر بتاريخ: ٤ رمضان ١٤٣٨هـ
الموافق: ٣٠ مايو ٢٠١٧م

وزارة العمل والتنمية الاجتماعية

قرار رقم (٣٣) لسنة ٢٠١٧
بشأن إلغاء ترخيص معهد إمبكت للتدريب
(مؤسسة تدريبية خاصة)

وزير العمل والتنمية الاجتماعية:

بعد الاطلاع على المرسوم رقم (٢٥) لسنة ١٩٩٨ بشأن المؤسسات التعليمية والتدريبية الخاصة،

وعلى القرار رقم (١٣) لسنة ١٩٩٩ بشأن المؤسسات التدريبية الخاصة،

وعلى القرار رقم (٢٠) لسنة ٢٠١٢ بشأن الترخيص بإنشاء معهد إمبكت للتدريب (مؤسسة تدريبية خاصة)،

واستناداً إلى الطلب المقدَّم من مالك الترخيص لإلغاء الترخيص،

قرر الآتي:

مادة -١-

يلغى الترخيص الصادر بالقرار رقم (٢٠) لسنة ٢٠١٢ للسيدة/ سكينة محمد عبدالرضا عبدالكريم، والمقيَّد في السجل التجاري تحت رقم (١-٨٢٦٥٧) باسم معهد إمبكت للتدريب (Impact Training Institute).

مادة - ٢ -

على المعنيين تنفيذ هذا القرار، ويُعمل به من اليوم التالي لتاريخ نشره في الجريدة الرسمية.

وزير العمل والتنمية الاجتماعية

جميل بن محمد علي حميدان

صدر بتاريخ: ١١ شعبان ١٤٣٨هـ

الموافق: ٧ مايو ٢٠١٧م

وزارة الصناعة والتجارة والسياحة

قرار رقم (٩٧) لسنة ٢٠١٧
بتعديل المادة الرابعة من
القرار رقم (٨٤) لسنة ٢٠١٧
بشأن تنظيم نشاطَ حاضنات ومُسَرِّعات الأعمال

وزير الصناعة والتجارة والسياحة:

بعد الاطلاع على المرسوم رقم (٩) لسنة ٢٠١٦ بإعادة تنظيم وزارة الصناعة والتجارة والسياحة،

وعلى القرار رقم (٨٤) لسنة ٢٠١٧ بشأن تنظيم نشاط حاضنات ومُسَرِّعات الأعمال،

وبناءً على عرْض وكيل الوزارة لشئون الصناعة،

قرر الآتي:

المادة الأولى

يُستبدل بنص المادة الرابعة من القرار رقم (٨٤) لسنة ٢٠١٧ بشأن تنظيم نشاط حاضنات ومُسَرِّعات الأعمال، النص الآتي:

"**المادة الرابعة:**

يكون إدراج أيٍّ من الشركات الناشئة تحت إحدى حاضنات ومُسَرِّعات الأعمال بناءً على طلب يقدَّم لإدارة التسجيل، وتكون مدة الإدراج بحد أقصى سنتين، ويجوز التمديد لمدة سنة واحدة فقط بعد موافقة الإدارة."

المادة الثانية

على وكيلي وزارة الصناعة والتجارة والسياحة تنفيذ هذا القرار، ويُعمل به من اليوم التالي لتاريخ نشره في الجريدة الرسمية.

وزير الصناعة والتجارة والسياحة

زايد بن راشد الزياني

صدر بتاريخ: ٤ رمضان ١٤٣٨هـ

الموافق: ٣٠ مايو ٢٠١٧م

وزارة الأشغال وشئون البلديات والتخطيط العمراني

قرار رقم (٥٧) لسنة ٢٠١٧
بإصدار اللائحة الداخلية لتنظيم عمل اللجنة التنسيقية العليا بين المجالس البلدية والوزارات المعنية

وزير الأشغال وشئون البلديات والتخطيط العمراني – رئيس اللجنة التنسيقية العليا بين المجالس البلدية والوزارات المعنية:

بعد الاطلاع على قانون البلديات الصادر بالمرسوم بقانون رقم (٣٥) لسنة ٢٠٠١ وتعديلاته، ولائحته التنفيذية الصادرة بالقرار رقم (١٦) لسنة ٢٠٠٢ وتعديلاتها،

وعلى القرار رقم (١٧) لسنة ٢٠٠٩ بإنشاء وتشكيل اللجنة التنسيقية العليا بين المجالس البلدية والوزارات المعنية، المعدَّل بالقرار رقم (٢٣) لسنة ٢٠١٥،

وبناءً على عرْض وكيل الوزارة لشئون البلديات،

قرر الآتي:

المادة الأولى

يُعمل بأحكام اللائحة الداخلية لتنظيم عمل اللجنة التنسيقية العليا بين المجالس البلدية والوزارات المعنية، المرافقة لهذا القرار.

المادة الثانية

على وكيل الوزارة لشئون البلديات والمعنيين تنفيذ هذا القرار، ويُعمل به من اليوم التالي لتاريخ نشره في الجريدة الرسمية.

وزير الأشغال وشئون البلديات والتخطيط العمراني
رئيس اللجنة التنسيقية العليا
بين المجالس البلدية والوزارات المعنية
عصام بن عبدالله خلف

صدر بتاريخ: ٢٩ شعبان ١٤٣٨هـ
الموافق: ٢٥ مايو ٢٠١٧م

اللائحة الداخلية لتنظيم عمل اللجنة التنسيقية العليا بين المجالس البلدية والوزارات المعنية

مادة (١)

في تطبيق أحكام هذه اللائحة، يكون للكلمات والعبارات التالية المعانيَ المبينةَ قرينَ كُلٍّ منها، ما لم يقتضِ سياقُ النص خلافَ ذلك:

الوزارة: الوزارة المعنية بشئون البلديات.

اللجنة: اللجنة التنسيقية العليا بين المجالس البلدية والوزارات المعنية.

الرئيس: رئيس اللجنة.

نائب الرئيس: نائب رئيس اللجنة.

العضو: عضو اللجنة.

أمين السر: أمين سر اللجنة.

مادة (٢)

تختص اللجنة بالعمل على تحقيق المواءمة بين خطط المجالس البلدية وبرامج الوزارات الخدمية، من خلال التَّحَقُّق من وجود خطط واضحة ومعتمَدة للمشاريع الإنشائية، متضمِّنة مؤشرات المتابعة ومواعيد التنفيذ، وكذلك التأكد من مدى مواءمة محتوى خطط قطاع التخطيط للمشاريع الإنشائية بالوزارات، وذلك وِفْقاً لأحكام قانون البلديات الصادر بالمرسوم بقانون رقم (٣٥) لسنة ٢٠٠١ ولائحته التنفيذية.

مادة (٣)

تعقد اللجنة اجتماعاتها بدعوة من رئيسها مرة كل ثلاثين يوماً على الأقل، أو كلما اقتضت الضرورة ذلك، في المكان والزمان الذي يحدده الرئيس. ولا يكون اجتماع اللجنة صحيحاً إلا بحضور أغلبية أعضائها، على أن يكون من بينهم الرئيس أو نائبه.

مادة (٤)

تعقد اللجنة اجتماعاً عادياً بدعوة من رئيسها بموجب كتاب يوجِّهه أمين السر قبل موعد الجلسة بأسبوع على الأقل، ويُخطر أعضاء اللجنة بجدول أعمال الاجتماع قبل انعقاد الاجتماع بوقت كافٍ، وبما لا يقل عن ثلاثة أيام عمل من تاريخ عقد الاجتماع.

مادة (٥)

يجوز للرئيس الدعوة لاجتماع غير عادي في أيِّ وقت كلما اقتضت الحاجة ذلك، أو عند تسَلُّمه طلباً كتابياً مسبَّباً من خمسة أعضاء، وتكون الدعوة للاجتماع في هذه الحالة خلال عشرة أيام عمل من تاريخ تسَلُّم الطلب. ويُخطَر أعضاء اللجنة بجدول الاجتماع بسبعة أيام عمل قبل تاريخ عقد الاجتماع.

مادة (٦)

لكل عضو الحق في تقديم ما يشاء من الاقتراحات والدراسات المكتوبة إلى اللجنة قبل الوقت المقرَّر لانعقاد الاجتماع العادي بخمسة أيام على الأقل، وعلى أمين السر توزيعها على الأعضاء. وللجنة حق إقرار مناقشتها في الاجتماع ذاته أو إدراجها في جدول أعمال الاجتماعات التالية.

مادة (٧)

في حال اكتمال النصاب، يفتتح رئيس الجلسة الاجتماع، ثم تُتلى أسماء الأعضاء المعتذرين عن الحضور ومحضر الاجتماع السابق، ويُعطى الكلام لمن يريد تصحيح المحضر، فإذا وقع خلاف يحسمه الرئيس، ثم يوقَّع من باقي الأعضاء.

وتشرع اللجنة في بحث الموضوعات وفق ترتيبها في جدول الأعمال ما لم تقرر اللجنة خلاف ذلك، ولها أنْ تقرر إرجاء بحث أيٍّ من الموضوعات المدرجة في جدول الأعمال لجلسة لاحقة. وتبدأ المناقشة بقراءة الموضوع المعروض، ثم يعطي رئيس اللجنة الكلام للعضو طالب الكلمة حسب الترتيب. وبعد انتهاء اللجنة من المناقشة تصدر قراراتها وتوصياتها بتوافق الأعضاء.

وفي حال ما أبدت إحدى الوزارات المعنية تحفُّظاتها بشأن تنفيذ توصيات اللجنة فينبغي على تلك الجهة عرْض الأمر على مجلس الوزراء لاتخاذ ما يراه مناسباً في هذا الشأن.

مادة (٨)

يجب على كل عضو عند نظره لأي موضوع تكون له فيه مصلحة شخصية مباشرة أو غير مباشرة أو أية مصالح أخرى تتعارض مع مقتضيات عمله أنْ يفصح عن ذلك كتابة بمجرد عِلْمه بنظر اللجنة لهذا الموضوع، ولا يجوز له الاشتراك في المداولات حول هذا الموضوع.

مادة (٩)

يكون للجنة أمين سر من بين موظفي الوزارة بدرجة لا تقل عن مستوى رئيس قسم، يتولى المهام الآتية:

١- إعداد جداول أعمال الاجتماعات.

٢- تدوين محاضر الاجتماعات، على أنْ يحرِّر لكل اجتماع من اجتماعات اللجنة محضراً يدوِّن فيه أسماء الأعضاء الحاضرين والغائبين، وموجزاً لما دار من مناقشات، ونصوص التوصيات والقرارات. ويوقِّع الرئيس ونائب الرئيس وأعضاء اللجنة على المحضر.

٣- حِفْظ الملفات والمستندات والوثائق الخاصة بأعمال اللجنة.

٤- متابعة تنفيذ قرارات وتوصيات اللجنة مع الجهات المعنية.

٥- تقديم تقارير للجنة بصفة دورية بشأن ما تم إنجازه وتنفيذه من قرارات وتوصيات.

مادة (١٠)

للجنة أن تشكل من بين أعضائها أو من ذوي الاختصاص لجاناً فرعية لدراسة موضوع ما، كما يجوز لها أنْ تستعين بمن ترى الاستعانة بهم من الخبراء والمختصين، وأنْ تدعوَهم لحضور اجتماعاتها أو اجتماعات اللجان الفرعية لمناقشتهم والاستماع لآرائهم، أو لتزويد اللجنة بالمعلومات التي تراها ضرورية لإنجاز أعمالها. ويثبت ذلك كله في محضر الاجتماع.

مادة (١١)

يرفع رئيس اللجنة تقريراً بنتائج أعمال اللجنة إلى مجلس الوزراء بصفة دورية كل دور انعقاد للمجالس البلدية، متضمناً أهم ما تمت مناقشته من موضوعات وملخص القرارات والتوصيات التي اتخذتها اللجنة.

مادة (١٢)

لرئيس اللجنة أو نائبه أو من يفوضه الرئيس لذلك التصريح في وسائل الإعلام عن أعمال اللجنة أو اجتماعاتها، وذلك مع مراعاة سرية المعلومات والبيانات والمستندات المتعلقة بعمل اللجنة.

هيئة المعلومات والحكومة الإلكترونية

قرار رقم (١٢) لسنة ٢٠١٧
بشأن اعتماد الخطة الوطنية للتَّرَدُّدات

الرئيس التنفيذي لهيئة المعلومات والحكومة الإلكترونية:

بعد الاطلاع على قانون الاتصالات الصادر بالمرسوم بقانون رقم (٤٨) لسنة ٢٠٠٢، وعلى الأخص المادة الأولى من الباب الأول،

وعلى المرسوم رقم (٦٩) لسنة ٢٠١٥ بإنشاء هيئة المعلومات والحكومة الإلكترونية،

وعلى القرار رقم (٥٠) لسنة ٢٠١٥ بإنشاء وتشكيل لجنة استراتيجية وتنسيق الطَّيف التَّرَدُّدِي،

وبعد أخْذ رأي لجنة استراتيجية وتنسيق الطَّيف التَّرَدُّدِي، وموافقتها على اعتماد مسودة الخطة الوطنية للتَّرَدُّدات في اجتماعها الخامس بتاريخ ١٢ ديسمبر ٢٠١٦،

وبناءً على عرْض مدير إدارة الترخيص اللاسلكية والتَّرَدُّدات والرقابة،

قرر الآتي:

المادة الأولى

تُعتمَد الخطة الوطنية للتَّرَدُّدات المرافقة لهذا القرار.

المادة الثانية

يُنشر هذا القرار والخطة المرافقة له في الجريدة الرسمية، وعلى مدير إدارة الترخيص اللاسلكية والتَّرَدُّدات والرقابة مراقبة تنفيذها، ويُعمل بها من اليوم التالي لتاريخ النشر.

الرئيس التنفيذي لهيئة المعلومات والحكومة الإلكترونية
رئيس لجنة استراتيجية وتنسيق الطَّيْف التَّرَدُّدي
محمد علي القائد

صدر بتاريخ: ٢٠ شعبان ١٤٣٨هـ
الموافق: ١٦ مايو ٢٠١٧م

مملكة البحرين
الخطة الوطنية للترددات
National Frequency Plan (NFP)

Version 1/2016

المحتوى

المقدمة

يعتبر طيف الترددات الراديوية موردا وطنيا محدودا ولذلك فمن الأهمية بمكان أن يستعمل مورد الطيف بطريقة تتسم بالكفاءة والفعالية. وتعد الخطة الوطنية للترددات أداة رئيسية في إدارة موارد الطيف توفر معلومات عن خدمات الاتصالات الراديوية المسموح بها في كل نطاق ترددي في مملكة البحرين.

وبالإضافة إلى احترام الاتفاقيات الدولية، ينبغي أن تعكس الخطة الوطنية للترددات السياسة الوطنية بشأن استخدام الطيف الراديوي (دعما للأهداف الأوسع نطاقا لقطاع الاتصالات والأمن والبث الإذاعي، فضلا عن المستخدمين الحكوميين) ووفقا لقرار مجلس الوزراء الموقر رقم 50 لعام 2015 بشأن إنشاء وتشكيل لجنة استراتيجية وتنسيق الطيف الترددي (اللجنة)، وافقت اللجنة المذكورة على الخطة الوطنية للترددات الواردة في هذا القرار.

ويعتمد المدى الذي تتحقق به الفوائد الكاملة للطيف الراديوي على الاستخدام الفعلي له ومدى إدارته بكفاءة. وقد تم إعداد وإدارة هذه الخطة من قبل إدارة التراخيص اللاسلكية والترددات والرقابة وفقا لتعريف "الخطة الوطنية للترددات" الوارد في المادة (1) والمادة (42) "الإشراف على ترددات الاتصالات" في المرسوم بقانون رقم 48 لسنة 2002 مع مراعاة السياسة الوطنية لتخطيط الطيف الراديوي وتخصيصه واحتياجات وخطط جميع أعضاء اللجنة.

وتشمل الأهداف الرئيسية لاستخدام الطيف الراديوي ما يلي:-

- الوفاء بمتطلبات الالتزامات والاتفاقيات الدولية.
- دعم النمو الاقتصادي وخلق فرص العمل.
- تلبية متطلبات مختلف القطاعات من الطيف الراديوي بما فيها الجهات المسؤولة عن الدفاع والأمن الوطني.
- تلبية متطلبات الطيران المدني والقطاعات البحرية.
- دعم إدخال تكنولوجيات أكثر كفاءة من حيث استخدام الطيف الراديوي، بما في ذلك إدخال شبكات الإذاعة الرقمية.
- توفير البنى التحتية التنافسية للاتصالات من خلال اجراءات عادلة ومحايدة.
- إدخال أجيال حديثة من التكنولوجيات للاتصالات المتنقلة العامة والخاصة.
- تلبية متطلبات الطيف الراديوي لخدمات الملاحة المقدمة دوليا، مثل أنظمة تحديد المواقع.
- تسهيل نشر شبكات الاتصالات ذات النطاق العريض.
- توفير الترددات المنسقة إقليميا وعالميا لنظام حماية الجمهور والإغاثة في حالات الكوارث، من أجل مساعدة فرق الإنقاذ والطوارئ المحلية والدولية التواصل مع بعضها البعض.
- تحفيز الابتكار التكنولوجي والقدرة التنافسية بطريقة محايدة.
- إدخال تقنيات جديدة لإدارة الطيف الراديوي.
- توفير الطيف الراديوي للمناطق التي لا تتوفر فيها بنية تحتية سلكية والمناطق النائية مع التركيز بشكل خاص على توفير الطيف الراديوي لخدمات الاتصالات لأغراض التعليم (بما في ذلك الفن والثقافة) وغيرها من المصالح العامة (بما في ذلك الصحة والطوارئ).

وينبغي أن تنعكس الأهداف المذكورة أعلاه على توزيعات النطاقات الترددية الواردة في الخطة الوطنية للترددات.

تفاصيل الخطة الوطنية للترددات

تستند الخطة الوطنية للترددات على متطلبات الطيف الحالية والمتوقعة في المملكة في المستقبل. وفي حالة وجود خطط أو ضوابط اضافية، يرد ذكر ذلك في عمود المعلومات الإضافية (additional information). ومن المتوقع أن تنفذ الخطة الوطنية للترددات بشكل عملي جزئيا أو كليا، في أقرب وقت.

وتعتبر هذه الوثيقة بمثابة مرجع للمستوردين والمصنعين ومستخدمي معدات الاتصالات الراديوية وكذلك للدول والمنظمات الدولية المسؤولة عن الاتصالات.

وتتغير توزيعات الترددات في لوائح الراديو بعد انتهاء كل مؤتمر عالمي للاتصالات الراديوية حيث يعاد تحديد توزيع الترددات الجديدة لصالح خدمات معينة ذات مطالب أكثر تناميا، وتلغى الخدمات القديمة. وستحدث أيضا تغييرات على استخدام الطيف على الصعيد الدولي أو نتيجة للقرارات الوطنية المتخذة لتلبية احتياجات وطنية محددة. ومن هذا المنطلق، فإن إدارة التراخيص اللاسلكية والترددات والرقابة سوف تقوم بمراجعة وتحديث الخطة الوطنية للترددات بصورة دورية بالتنسيق والتعاون مع لجنة استراتيجية وتنسيق الطيف الترددي قبل وبعد المؤتمر العالمي للاتصالات الراديوية للاتحاد الدولي للاتصالات أو بعد أي مبادرة لتوحيد استخدامات الترددات بين دول مجلس التعاون الخليجي أو الفريق العربي الدائم للطيف الترددي (ASMG) .

وتشمل التطورات الوطنية التي قد تؤدي إلى تحيين الخطة الوطنية للترددات، على سبيل المثال:-

- قرارات اعتماد تكنولوجيات جديدة من قبل لجنة استراتيجية وتنسيق الطيف الترددي.
- طلبات تحديث التكنولوجيا من قبل المستخدمين الحاليين.
- تغيير المتطلبات لمختلف التطبيقات الراديوية.
- المتطلبات الناشئة عن اللجان الاستشارية الوطنية القائمة على الخدمة.

كما أن أنشطة وكالات الأمم المتحدة المتخصصة الأخرى لها كذلك، وبالاخص منظمة الطيران المدني الدولي والمنظمة البحرية الدولية. وبما أن الترددات الراديوية لا تقف عند الحدود الجغرافية، فمن الضروري أيضا مراعاة استخدام الطيف في الدول المجاورة.

هيكلة جدول الخطة الوطنية للترددات

يتكون جدول الخطة الوطنية للترددات من أربعة أعمدة:

العمود الأول: RR Region 1 allocations

يبين هذا العمود نوع خدمة الاتصالات الراديوية التي خصص لها نطاق التردد المعني في الإقليم 1 وفقا للمادة 5 من لوائح الراديو للاتحاد الدولي للاتصالات (RR-2016). الإقليم 1 هو المنطقة الجغرافية التي تقع فيها مملكة البحرين. ويتضمن هذا العمود:

- النطاق الترددي.
- التخصيصات بناء على المادة 5 من لوائح الراديو التي تتوافق مع الإقليم 1 وهي ذات طابع عام.
- حواشي المادة 5 من لوائح الراديو ذات الصلة بالإقليم 1.

انظر أيضا الملحق رقم 2 للاطلاع على تفاصيل الحواشي الواردة في المادة 5 من لوائح الراديو المذكورة في العمود 1.

العمود الثاني: The National Frequency Allocations

لكل نطاق ترددي:

- توزيع الترددات على خدمات الاتصالات الراديوية في المملكة استنادا إلى العمود الأول والحواشي.
- الحواشي الوطنية في مملكة البحرين ذات الصلة بنطاق التردد المعني.

انظر أيضا الملحق رقم 3 للاطلاع على التفاصيل الكاملة للحواشي الوطنية للبحرين المذكورة في العمود الثاني.

العمود الثالث: Major Utilisation

يعرض هذا العمود، حسب الاقتضاء، معلومات تتعلق بنطاق التردد وبعض الخدمات المعينة إلى جانب الاستخدامات الرئيسية لطيف الاتصالات الراديوية. ومع ذلك فإن الاستخدامات المذكورة لخدمات اتصالات راديوية محددة لا تحول دون استخدام الخدمات الأخرى المشار إليها في العمود الثاني.

العمود الرابع: Additional Information

يعرض هذا العمود معلومات تفصيلية عن خطط الترددات وترتيبات القنوات المستخدمة في المملكة فضلا عن أي ترتيبات اقتران بين النطاقات. ويمكن الرجوع أيضا إلى النصوص التنظيمية الأوروبية أو الاتحاد الدولي للاتصالات أو غيرها من النصوص التنظيمية التي تم إعتماد محتواها في المملكة، بالإضافة إلى تضمين معلومات أخرى ذات صلة في هذا العمود.

أرقام الحواشي المميزة تحريرياً وتحتها خط: *Underlined italic bolded footnotes numbers*

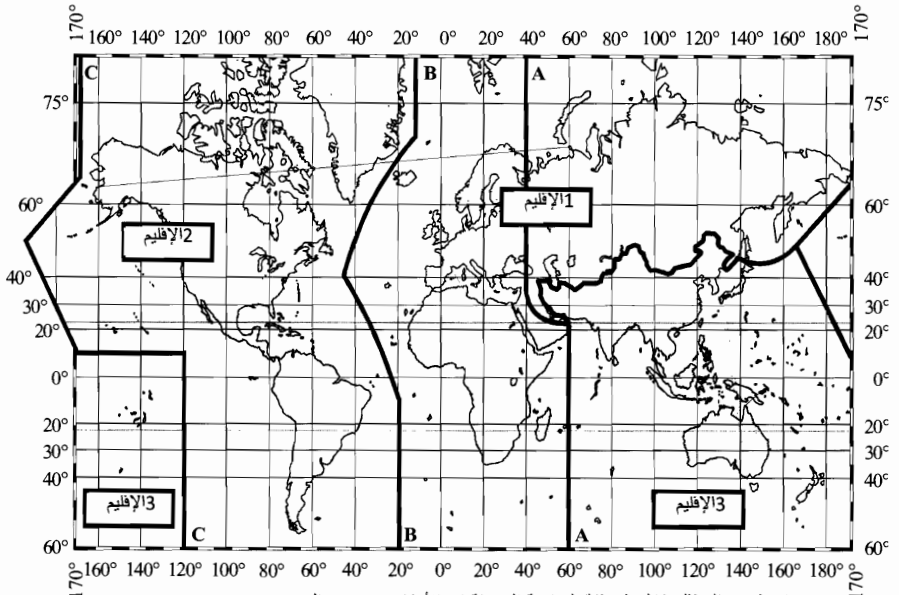
تم تمييز الحواشي المتعلقة بمملكة البحرين أو البلدان المجاورة تحريرياً بخط داكن ووضع تحتها خط. حيث تشمل هذه الحواشي استثناءات أو شروط أو قيود إلزامية يجب مراعاتها أو الامتثال لها في استخدام نطاقات التردد أو خدمات الاتصالات الراديوية في المملكة التي تنطبق عليها هذه الحواشي.

وبإيجاز، يعكس العمود الأول النطاق الترددي والخدمات المحددة في لوائح الراديو للاتحاد الدولي للاتصالات، وهي وثيقة تستند إلى معاهدات دولية، ويشير العمود الثاني إلى الخدمات في مملكة البحرين في نطاقات ترددية محددة. وفي معظم الحالات تكون نفس الخدمات المذكورة في العمود الأول. وحيثما لا تكون كذلك، توجد التفاصيل عموما في حاشية وطنية. وقد يكون السبب هو زيادة كفاءة استخدام الطيف الترددي أو الممارسة في بلد أو منطقة مجاورة، وبالتالي اعتبر من الأفضل استخدام الترددات في المملكة بنفس الطريقة أو بطريقة مماثلة، في حين أن العمود الثالث هو عمود الاستخدام الغالب لهذه النطاقات الترددية في المملكة. ويوفر العمود الرابع معلومات مفيدة عن ترتيبات القنوات و الترددات المقترنة فضلا عن المراجع الأخرى ذات الصلة.

التعاريف الرئيسية للاتحاد الدولي للإتصالات

تستند التعاريف التالية إلى لوائح الراديو للاتحاد الدولي للاتصالات و هي ذات صلة في سياق الخطة الوطنية للترددات:

- *توزيع* (نطاق ترددات) Allocation (of a frequency band) : هو تدوين نطاق ترددات معين في جدول توزيع نطاقات الترددات، حتى تستعمله خدمة واحدة أو أكثر من *خدمات الاتصالات الراديوية* الفضائية أو للأرض، أو خدمة *علم الفلك الراديوي* وفق شروط خاصة. وينطبق هذا المصطلح كذلك على نطاق الترددات المعني.
- *تعيين* (تردد راديوي أو قناة راديوية) Allotment (of a radio frequency or radio frequency channel): هو تدوين قناة راديوية معينة في خطة اعتمدها مؤتمر مختص، حتى تستعملها *إدارة* أو عدة *إدارات لخدمة اتصالات راديوية فضائية* أو للأرض في بلد واحد أو في عدة بلدان، وفي منطقة واحدة أو في عدة مناطق جغرافية محددة، ووفقاً لشروط خاصة.
- *تخصيص* (تردد راديوي أو قناة راديوية) Assignment (of a radio frequency or radio frequency channel) : هو ترخيص تعطيه *إدارة* إلى *محطة راديوية* لتستعمل تردداً راديوياً محدداً أو قناة راديوية محددة، وفقاً لشروط خاصة.
- *الإقليم 1*: يشمل الإقليم 1 المنطقة التي يحدها الخط A شرقاً (انظر تعريف الخطوط A وB وC أدناه) والخط B غرباً، باستثناء أراضي جمهورية إيران الإسلامية المحصورة بين هذين الحدين. كما يشمل كامل أراضي أرمينيا وأذربيجان والاتحاد الروسي وجورجيا وكازاخستان ومنغوليا وأوزبكستان وقيرغيزستان وطاجيكستان وتركمانستان وتركيا وأوكرانيا ومنطقة شمال الاتحاد الروسي المحصورة بين الخطين A وC كما هو مبين في الشكل التوضيحي (1).



شكل توضيحي (1)

- *الإقليم 2*: يشمل الإقليم 2 المنطقة التي يحدها الخط B شرقاً والخط C غرباً كما هو مبين في الشكل التوضيحي (1).
- *الإقليم 3*: يشمل الإقليم 3 المنطقة التي يحدها الخط C شرقاً والخط A غرباً، باستثناء أراضي أرمينيا وأذربيجان والاتحاد الروسي وجورجيا وكازاخستان ومنغوليا وأوزبكستان وقيرغيزستان وطاجيكستان وتركمانستان وتركيا وأوكرانيا ومنطقة شمال الاتحاد الروسي. كما يشمل الجزء من أراضي جمهورية إيران الإسلامية الواقع خارج هذه الحدود كما هو مبين في الشكل التوضيحي (1).
- *الخط A*: ينطلق الخط A من القطب الشمالي ويتبع خط الزوال (دائرة الطول) 40° شرق غرينتش حتى خط التوازي (دائرة العرض) 40° شمالاً، ثم قوس الدائرة الكبرى حتى نقطة تقاطع دائرة الطول 60° شرقاً مع مدار السرطان، وأخيراً دائرة الطول 60° شرقاً حتى القطب الجنوبي.
- *الخط B*: ينطلق الخط B من القطب الشمالي ويتبع دائرة الطول 10° غرب غرينتش حتى تقاطعها مع دائرة العرض 72° شمالاً، ثم قوس الدائرة الكبرى حتى نقطة تقاطع خط الزوال (دائرة الطول) 50° غرباً وخط التوازي (دائرة العرض) 40° شمالاً، ثم من جديد، قوس الدائرة الكبرى حتى نقطة تقاطع دائرة الطول 20° غرباً ودائرة العرض 10° جنوباً، وأخيراً دائرة الطول 20° غرباً حتى القطب الجنوبي.
- *الخط C*: ينطلق الخط C من القطب الشمالي ويتبع قوس الدائرة الكبرى حتى نقطة تقاطع دائرة العرض 65° 30' شمالاً مع الحد الدولي لمضيق بيرنغ، ثم قوس الدائرة الكبرى حتى نقطة تقاطع دائرة الطول 165° شرق غرينتش مع دائرة العرض 50° شمالاً، ثم قوس الدائرة الكبرى حتى نقطة تقاطع دائرة الطول 170° غرباً ودائرة العرض 10° شمالاً، ثم يسير مع دائرة العرض 10° شمالاً حتى تقاطعها مع دائرة الطول 120° غرباً، ويتبع أخيراً دائرة الطول 120° غرباً حتى القطب الجنوبي.
- *الخدمات الأولية* Primary Services : خدمات الاتصالات الراديوية المفصلة في العمودين 1 و 2 في الخطة الوطنية للترددات التي توجد في أحرف كبيرة (مثل MOBILE) لها أولوية، وهي أعلى فئة من النفاذ إلى الترددات الراديوية وتسمى الخدمات "الأولية".
- *الخدمات الثانوية* Secondary Services *:* خدمات الاتصالات الراديوية المفصلة في العمودين 1 و 2 في الخطة الوطنية للترددات التي توجد في أحرف صغيرة (Mobile) تكون خدمات "ثانوية".
- إن محطات الخدمة الثانوية:
  - يجب ألا تسبب تداخلاً ضاراً لمحطات خدمة أولية، سبق أن خصصت لها ترددات، أو قد تخصص لها ترددات مستقبلاً.
  - لا يجوز لها أن تطالب بالحماية من التداخلات الضارة التي تسببها محطات خدمة أولية سبق أن خصصت لها ترددات، أو قد تخصص لها ترددات مستقبلاً.
  - يحق لها أن تطالب بالحماية من التداخلات الضارة التي تسببها محطات هذه الخدمة أو محطات خدمة (خدمات) ثانوية أخرى قد تخصص لها ترددات مستقبلاً.
- عندما يتم سرد أكثر من خدمة واحدة بنفس الحالة، ترتيب في الجدول لا يشير إلى أي أولوية نسبية بين الخدمات المذكورة.

National Frequency Plan Table

جدول الخطة الوطنية للترددات

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
Below 8.3 KHz (Not allocated) 5.53 ***5.54***	**Below 8.3 KHz** (Not allocated)	Inductive Systems	
8.3-9 KHz METEOROLOGICAL AIDS ***5.54A 5.54B*** 5.54C	**8.3-9 KHz** METEOROLOGICAL AIDS RADIONAVIGATION FIXED MOBILE	Inductive Systems	
9-11.3 KHz METEOROLOGICAL AIDS ***5.54A*** RADIONAVIGATION	**9-11.3 KHz** METEOROLOGICAL AIDS RADIONAVIGATION **BHR4**	Inductive Systems	
11.3-14 KHz RADIONAVIGATION	**11.3-14 KHz** RADIONAVIGATION **BHR4**	Inductive Systems	
14-19.95 KHz FIXED MARITIME MOBILE ***5.57*** 5.55 ***5.56***	**14-19.95 KHz** FIXED MARITIME MOBILE **BHR4**	Inductive Systems	
19.95-20.05 KHz STANDARD FREQUENCY AND TIME SIGNAL (20 kHz)	**19.95-20.05 KHz** STANDARD FREQUENCY AND TIME SIGNAL (20 kHz) **BHR4**	Inductive Systems	Refer to the ITU Radio Regulation Article 26
20.05-70 KHz FIXED MARITIME MOBILE ***5.57*** ***5.56*** 5.58	**20.05-70 KHz** FIXED MARITIME MOBILE **BHR4**	Inductive Systems	
70-72 KHz RADIONAVIGATION ***5.60***	**70-72 KHz** RADIONAVIGATION **BHR4**	Inductive Systems	
72-84 KHz FIXED MARITIME MOBILE ***5.57*** RADIONAVIGATION ***5.60*** ***5.56***	**72-84 KHz** FIXED MARITIME MOBILE RADIONAVIGATION **BHR4**	Inductive Systems	

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
84-86 KHz	**84-86 KHz**	Inductive Systems	
RADIONAVIGATION ***5.60***	RADIONAVIGATION		
	BHR4		
86-90 KHz	**86-90 KHz**	Inductive Systems	
FIXED	FIXED		
MARITIME MOBILE ***5.57***	MARITIME MOBILE		
RADIONAVIGATION	RADIONAVIGATION		
5.56	**BHR4**		
90-110 KHz	**90-110 KHz**	Inductive Systems	
RADIONAVIGATION ***5.62***	RADIONAVIGATION		
Fixed	Fixed		
5.64	**BHR4**		
110-112 KHz	**110-112 KHz**	Inductive Systems	
FIXED	FIXED		
MARITIME MOBILE	MARITIME MOBILE		
RADIONAVIGATION	RADIONAVIGATION		
5.64	**BHR4**		
112-115 KHz	**112-115 KHz**	Inductive Systems	
RADIONAVIGATION ***5.60***	RADIONAVIGATION		
	BHR4		
115-117.6 KHz	**115-117.6 KHz**	Inductive Systems	
RADIONAVIGATION ***5.60***	RADIONAVIGATION		
Fixed	Fixed		
Maritime mobile	Maritime mobile		
5.64 5.66	**BHR4**		
117.6-126 KHz	**117.6-126 KHz**	Inductive Systems	
FIXED	FIXED		
MARITIME MOBILE	MARITIME MOBILE		
RADIONAVIGATION ***5.60***	RADIONAVIGATION		
5.64	**BHR4**		
126-129 KHz	**126-129 KHz**	Inductive Systems	
RADIONAVIGATION ***5.60***	RADIONAVIGATION		
	BHR4		
129-130 KHz	**129-130 KHz**	Inductive Systems	
FIXED	FIXED		
MARITIME MOBILE	MARITIME MOBILE		
RADIONAVIGATION ***5.60***	RADIONAVIGATION		
5.64	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
130-135.7 KHz	**130-135.7 KHz**	Inductive Systems	
FIXED	FIXED		
MARITIME MOBILE	MARITIME MOBILE		
5.64 5.67	**BHR4**		
135.7-137.8 KHz	**135.7-137.8 KHz**	Inductive Systems	Stations in the amateur service using frequencies in the band 135.7-137.8 kHz shall not exceed a maximum radiated power of 1 W (e.i.r.p.) and shall not cause harmful interference to stations of the radionavigation service operating in countries listed in No. 5.67
FIXED	FIXED		
MARITIME MOBILE	MARITIME MOBILE		
Amateur ***5.67A***	Amateur **BHR2**		
5.64 5.67 5.67B	**BHR4**		
137.8-148.5 KHz	**137.8-148.5 KHz**	Inductive Systems	
FIXED	FIXED		
MARITIME MOBILE	MARITIME MOBILE		
5.64 5.67	**BHR4**		
148.5-255 KHz	**148.5-255 KHz**		Refer to the ITU GE75 Plan
BROADCASTING	BROADCASTING		
5.68 5.69 5.70	**BHR4**		
255-283.5 KHz	**255-283.5 KHz**		For Broadcasting refer to the ITU GE75 Plan
BROADCASTING	BROADCASTING		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
5.70 5.71	**BHR4**		
283.5-315 KHz	**283.5-315 KHz**		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
MARITIME RADIONAVIGATION (radiobeacons) ***5.73***	MARITIME RADIONAVIGATION (radiobeacons)		
5.72 ***5.74***	**BHR4**		
315-325 KHz	**315-325 KHz**		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
Maritime radionavigation (radiobeacons) ***5.73***	Maritime radionavigation (radiobeacons)		
5.72 5.75	**BHR4**		
325-405 KHz	**325-405 KHz**		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
5.72	**BHR4**		
405-415 KHz	**405-415 KHz**		
RADIONAVIGATION ***5.76***	RADIONAVIGATION		
5.72	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
415-435 KHz	**415-435 KHz**	MARITIME MOBILE	
MARITIME MOBILE 5.79	MARITIME MOBILE		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
	BHR4		
435-472 KHz	**435-472 KHz**	MARITIME MOBILE	
MARITIME MOBILE 5.79	MARITIME MOBILE		
Aeronautical radionavigation 5.77	Aeronautical radionavigation		
5.82	**BHR4**		
472-479 KHz	**472-479 KHz**	MARITIME MOBILE	
MARITIME MOBILE 5.79	MARITIME MOBILE		
Amateur ***5.80A***	Aeronautical radionavigation		
Aeronautical radionavigation 5.77 5.80	**BHR4**		
5.80B ***5.82***			
479-495 KHz	**479-495 KHz**	MARITIME MOBILE 490 kHz for NAVTEX (5.79A)	490 kHz to be used exclusively for the transmission by coast stations of navigational and meteorological warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy (5.82)
MARITIME MOBILE 5.79 ***5.79A***	MARITIME MOBILE		
Aeronautical radionavigation 5.77	Aeronautical radionavigation		
5.82	**BHR4**		
495-505 KHz	**495-505 KHz**		
MARITIME MOBILE	MARITIME MOBILE		
	BHR4		
505-526.5 KHz	**505-526.5 KHz**	MARITIME MOBILE 518 kHz for NAVTEX (5.79A)	The conditions for the use of the frequency 518 kHz by the maritime mobile service are prescribed in Articles 31 and 52 (5.84)
MARITIME MOBILE 5.79 ***5.79A*** ***5.84***	MARITIME MOBILE		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
	BHR4		
526.5-1 606.5 KHz	**526.5-1 606.5 KHz**	Medium frequency (MF) AM Broadcasting	Refer to the ITU GE75 Plan
BROADCASTING	BROADCASTING		
5.87 5.87A	**BHR4**		
1 606.5-1 625 KHz	**1 606.5-1 625 KHz**		
FIXED	FIXED		
MARITIME MOBILE 5.90	MARITIME MOBILE		
LAND MOBILE	LAND MOBILE		
5.92	**BHR4**		
1 625-1 635 KHz	**1 625-1 635 KHz**		
RADIOLOCATION	RADIOLOCATION		
5.93	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
1 635-1 800 KHz	**1 635-1 800 KHz**		
FIXED	FIXED		
MARITIME MOBILE 5.90	MARITIME MOBILE		
LAND MOBILE	LAND MOBILE		
5.92 5.96	**BHR4**		
1 800-1 810 KHz	**1 800-1 810 KHz**		
RADIOLOCATION	RADIOLOCATION		
5.93	**BHR4**		
1 810-1 850 KHz	**1 810-1 850 KHz**		Maximum power for Amateur is 400W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
5.98 ***5.99*** ***5.100*** 5.101	**BHR4**		
1 850-2 000 KHz	**1 850-2 000 KHz**		Maximum power for Amateur is 10W (e.i.r.p).
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
5.92 5.96 ***5.103***	Amateur **BHR1 BHR2**		
	BHR4		
2 000-2 025 KHz	**2 000-2 025 KHz**		
FIXED	FIXED		
MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)		
5.92 ***5.103***	**BHR4**		
2 025-2 045 KHz	**2 025-2 045 KHz**		
FIXED	FIXED		
MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)		
Meteorological aids ***5.104***	Meteorological aids		
5.92 ***5.103***	**BHR4**		
2 045-2 160 KHz	**2 045-2 160 KHz**	MARITIME MOBILE	
FIXED	FIXED		
MARITIME MOBILE	MARITIME MOBILE		
LAND MOBILE	LAND MOBILE		
5.92	**BHR4**		
2 160-2 170 KHz	**2 160-2 170 KHz**		
RADIOLOCATION	RADIOLOCATION		
5.93 ***5.107***	**BHR4**		
2 170-2 173.5 KHz	**2 170-2 173.5 KHz**		
MARITIME MOBILE	MARITIME MOBILE		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
2 173.5-2 190.5 KHz MOBILE (distress and calling) ***5.108*** ***5.109*** ***5.110*** ***5.111***	**2 173.5-2 190.5 KHz** MOBILE (distress and calling) **BHR4**	2 174.5 KHz for Distress 2 182 KHz for Distress and Calling 2 187.5 KHz for Distress for digital selective Calling	The conditions for the use of the band 2 173.5-2 190.5 kHz are prescribed in Articles 31 and 52 (5.108) The conditions for the use of 2 187.5 KHz are prescribed in Article 31 (5.109) The conditions for the use of 2 174.5 kHz are prescribed in Articles 31 (5.110) The carrier frequency 2 182 kHz, may also be used in accordance with the procedures in force for terrestrial radiocommunication services, for search and rescue operations concerning manned space vehicles. The conditions for the use of the frequencies are prescribed in Article 31 (5.111)
2 190.5-2 194 KHz MARITIME MOBILE	**2 190.5-2 194 KHz** MARITIME MOBILE **BHR4**		
2 194-2 300 KHz FIXED MOBILE except aeronautical mobile (R) ***5.92*** ***5.103*** 5.112	**2 194-2 300 KHz** FIXED MOBILE except aeronautical mobile (R) **BHR4**	MOBILE except aeronautical mobile (R)	
2 300-2 498 KHz FIXED MOBILE except aeronautical mobile (R) BROADCASTING ***5.113*** ***5.103***	**2 300-2 498 KHz** FIXED MOBILE except aeronautical mobile (R) BROADCASTING **BHR4**	MOBILE except aeronautical mobile (R)	For Broadcasting, refer to the ITU Radio Regulation Article 23
2 498-2 501 KHz STANDARD FREQUENCY AND TIME SIGNAL (2 500 kHz)	**2 498-2 501 KHz** STANDARD FREQUENCY AND TIME SIGNAL (2 500 kHz) **BHR4**		Refer to the ITU Radio Regulation Article 26
2 501-2 502 KHz STANDARD FREQUENCY AND TIME SIGNAL Space Research	**2 501-2 502 KHz** STANDARD FREQUENCY AND TIME SIGNAL Space Research **BHR4**		Refer to the ITU Radio Regulation Article 26

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
2 502-2 625 KHz FIXED MOBILE except aeronautical mobile (R) ***5.92*** ***5.103*** 5.114	**2 502-2 625 KHz** FIXED MOBILE except aeronautical mobile (R) **BHR4**	MOBILE except aeronautical mobile (R)	
2 625-2 650 KHz MARITIME MOBILE MARITIME RADIONAVIGATION ***5.92***	**2 625-2 650 KHz** MARITIME MOBILE MARITIME RADIONAVIGATION **BHR4**		
2 650-2 850 KHz FIXED MOBILE except aeronautical mobile (R) ***5.92*** ***5.103***	**2 650-2 850 KHz** FIXED MOBILE except aeronautical mobile (R) **BHR4**		
2 850-3 025 KHz AERONAUTICAL MOBILE (R) ***5.111*** ***5.115***	**2 850-3 025 KHz** AERONAUTICAL MOBILE (R) **BHR4**	3 023 KHz for Search and rescue	The carrier frequency 3 023 kHz, may also be used, in accordance with the procedures in force for terrestrial radiocommunication services, for search and rescue operations concerning manned space vehicles. The conditions for the use of the frequencies are prescribed in Article 31 (5.111, 5.115)
3 025-3 155 KHz AERONAUTICAL MOBILE (OR)	**3 025-3 155 KHz** AERONAUTICAL MOBILE (OR) **BHR4**		
3 155-3 200 KHz FIXED MOBILE except aeronautical mobile (R) ***5.116*** 5.117	**3 155-3 200 KHz** FIXED MOBILE except aeronautical mobile (R) **BHR4**	FIXED Inductive Systems	
3 200-3 230 KHz FIXED MOBILE except aeronautical mobile (R) BROADCASTING ***5.113*** ***5.116***	**3 200-3 230 KHz** FIXED MOBILE except aeronautical mobile (R) BROADCASTING **BHR4**	FIXED Inductive Systems	For Broadcasting, refer to the ITU Radio Regulation Article 23

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
3 230-3 400 KHz	**3 230-3 400 KHz**	FIXED	For Broadcasting, refer to the ITU Radio Regulation Article 23
FIXED	FIXED	MOBILE except aeronautical mobile	
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile	Inductive Systems	
BROADCASTING ***5.113***	BROADCASTING		
5.116 5.118	**BHR4**		
3 400-3 500 KHz	**3 400-3 500 KHz**		
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		
	BHR4		
3 500-3 800 KHz	**3 500-3 800 KHz**		Maximum power for Amateur is 100W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
5.92	**BHR4**		
3 800-3 900 KHz	**3 800-3 900 KHz**	FIXED	
FIXED	FIXED	LAND MOBILE	
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		
LAND MOBILE	LAND MOBILE		
	BHR4		
3 900-3 950 KHz	**3 900-3 950 KHz**		
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		
5.123	**BHR4**		
3 950-4 000 KHz	**3 950-4 000 KHz**	FIXED	For Broadcasting, refer to the ITU Radio Regulation Article 23
FIXED	FIXED		
BROADCASTING	BROADCASTING		
	BHR4		
4 000-4 063 KHz	**4 000-4 063 KHz**	FIXED	
FIXED	FIXED		
MARITIME MOBILE ***5.127***	MARITIME MOBILE		
5.126	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
4 063-4 438 KHz	**4 063-4 438 KHz**	4 125 KHz for Distress and Safety	The conditions for the use of 4 177.5 kHz are prescribed in Articles 31 (5.110)
MARITIME MOBILE ***5.79A*** ***5.109*** ***5.110*** ***5.130*** ***5.131*** ***5.132***	MARITIME MOBILE	4 177.5 KHz for Distress	The conditions for the use of 4 207.5 KHz are prescribed in Article 31 (5.109)
5.128	**BHR4**	4 207.5 KHz for Distress for digital selective Calling	The conditions for the use of the carrier frequency 4 125 kHz is prescribed in Articles 31 and 52 (5.130)
		4 209.5 kHz for NAVTEX (5.79A)	4 209.5 kHz is used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of narrow-band direct-printing techniques (5.131)
		4 210 kHz for maritime safety information (MSI)	
4 438-4 488 KHz	**4 438-4 488 KHz**	FIXED	
FIXED	FIXED	MOBILE except aeronautical mobile (R)	
MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)		
Radiolocation ***5.132A***	Radiolocation		
5.132B			
4 488-4 650 KHz	**4 488-4 650 KHz**		
FIXED	FIXED		
MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)		
	BHR4		
4 650-4 700 KHz	**4 650-4 700 KHz**		
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		
	BHR4		
4 700-4 750 KHz	**4 700-4 750 KHz**		
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		
	BHR4		
4 750-4 850 KHz	**4 750-4 850 KHz**	LAND MOBILE	For Broadcasting refer to the ITU Radio Regulation Article 23
FIXED	FIXED		
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		
LAND MOBILE	LAND MOBILE		
BROADCASTING ***5.113***	BROADCASTING		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
4 850-4 995 KHz	**4 850-4 995 KHz**	FIXED	For Broadcasting refer to the ITU Radio Regulation Article 23
FIXED	FIXED		
LAND MOBILE	LAND MOBILE		
BROADCASTING ***5.113***	BROADCASTING		
	BHR4		
4 995-5 003 KHz	**4 995-5 003 KHz**		Refer to the ITU Radio Regulation Article 26
STANDARD FREQUENCY AND TIME SIGNAL (5 000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (5 000 kHz)		
	BHR4		
5 003-5 005 KHz	**5 003-5 005 KHz**		Refer to the ITU Radio Regulation Article 26
STANDARD FREQUENCY AND TIME SIGNAL	STANDARD FREQUENCY AND TIME SIGNAL		
Space research	Space research		
	BHR4		
5 005-5 060 KHz	**5 005-5 060 KHz**		For Broadcasting, refer to the ITU Radio Regulation Article 23
FIXED	FIXED		
BROADCASTING ***5.113***	BROADCASTING		
	BHR4		
5 060-5 250 KHz	**5 060-5 250 KHz**	FIXED	
FIXED	FIXED		
Mobile except aeronautical mobile	Mobile except aeronautical mobile		
5.133			
	BHR4		
5 250-5 275 KHz	**5 250-5 275 KHz**	FIXED	
FIXED	FIXED	MOBILE except aeronautical mobile	
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
Radiolocation ***5.132A***	Radiolocation		
5.133A			
	BHR4		
5 275-5 351.5 KHz	**5 275-5 351.5 KHz**		
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
	BHR4		
5 351.5 -5 366.5 KHz	**5 351.5 -5 366.5 KHz**		Stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 15 W (e.i.r.p.)
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		Only 5 357.5 KHz and 5 363.5 KHz are allocated for Amateur.
Amateur ***5.133B***	Amateur **BHR2**		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
5 366.5 -5 450 KHz	**5 366.5 -5 450 KHz**		
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
	BHR4		
5 450-5 480 KHz	**5 450-5 480 KHz**		
FIXED	FIXED		
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		
LAND MOBILE	LAND MOBILE		
	BHR4		
5 480-5 680 KHz	**5 480-5 680 KHz**		
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		
5.111 5.115	**BHR4**		
5 680-5 730 KHz	**5 680-5 730 KHz**	5 680 KHz for Search and rescue	The carrier frequency 5 680 kHz, may also be used, in accordance with the procedures in force for terrestrial radiocommunication services, for search and rescue operations concerning manned space vehicles. The conditions for the use of the frequencies are prescribed in Article 31 (5.111)
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		
5.111 5.115	**BHR4**		
5 730-5 900 KHz	**5 730-5 900 KHz**	FIXED	
FIXED	FIXED		
LAND MOBILE	LAND MOBILE		
	BHR4		
5 900-5 950 KHz	**5 900-5 950 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING ***5.134***	BROADCASTING		
5.136	**BHR4**		
5 950-6 200 KHz	**5 950-6 200 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING	BROADCASTING		
	BHR4		
6 200-6 525 KHz	**6 200-6 525 KHz**	6 215 KHz for Distress and Safety	The conditions for the use of 6 268 kHz are prescribed in Articles 31 (5.110)
MARITIME MOBILE ***5.109 5.110 5.130 5.132***	MARITIME MOBILE	6 268 KHz for Distress	The conditions for the use of 6 312 KHz are prescribed in Article 31 (5.109)
5.137	**BHR4**	6 312 KHz for Distress for digital selective Calling	The conditions for the use of the carrier Frequency 6 215 kHz is prescribed in Articles 31 and 52 (5.130).
		6 314 kHz for maritime safety information (MSI)	
6 525-6 685 KHz	**6 525-6 685 KHz**		
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
6 685-6 765 KHz	**6 685-6 765 KHz**		
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		
	BHR4		
6 765-7 000 KHz	**6 765-7 000 KHz**	FIXED	(6765-6795 KHz) Inductive Systems
FIXED	FIXED		
MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)		
5.138			
	BHR4		
7 000-7 100 KHz	**7 000-7 100 KHz**		Maximum power for Amateur is 400W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
AMATEUR-SATELLITE	AMATEUR-SATELLITE		
5.140 5.141 5.141A	**BHR4**		
7 100-7 200 KHz	**7 100-7 200 KHz**		Maximum power for Amateur is 400W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
5.141A ***5.141B***	FIXED		
	MOBILE except aeronautical mobile (R)		
	BHR4		
7 200-7 300 KHz	**7 200-7 300 KHz**		Refer to the ITU Radio Regulation Article 12
BROADCASTING	BROADCASTING		
	BHR4		
7 300-7 400 KHz	**7 300-7 400 KHz**		For Broadcasting refer to the ITU Radio Regulation Article 12
BROADCASTING ***5.134***	BROADCASTING		
5.143 5.143A ***5.143B*** ***5.143C*** 5.143D	FIXED		
	BHR4		
7 400-7 450 KHz	**7 400-7 450 KHz**	Inductive Systems	For Broadcasting refer to the ITU Radio Regulation Article 12
BROADCASTING	BROADCASTING		
5.143B ***5.143C***	FIXED		
	BHR4		
7 450-8 100 KHz	**7 450-8 100 KHz**	FIXED	
FIXED	FIXED	Inductive Systems	
MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)		
5.144			
	BHR4		
8 100-8 195 KHz	**8 100-8 195 KHz**	MARITIME MOBILE	
FIXED	FIXED		
MARITIME MOBILE	MARITIME MOBILE	Inductive Systems	
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
8 195-8 815 KHz MARITIME MOBILE *5.109* *5.110* *5.132* *5.145* *5.111*	**8 195-8 815 KHz** MARITIME MOBILE **BHR4**	8 291 KHz for Distress and Safety 8 364 KHz for Search and rescue 8 376.5 KHz for Distress 8 414.5 KHz for Distress for digital selective Calling 8 416.5 kHz for maritime safety information (MSI) (7400-8800 KHz) Inductive Systems	The conditions for the use of 8 376.5 kHz are prescribed in Articles 31 (5.110) The conditions for the use of 8 414.5 KHz are prescribed in Article 31 (5.109) The carrier frequency 8 364 kHz, may also be used, in accordance with the procedures in force for terrestrial radiocommunication services, for search and rescue operations concerning manned space vehicles. The conditions for the use of the frequencies are prescribed in Article 31 (5.111) The conditions for the use of the carrier frequency 8 291 kHz, is prescribed in Articles 31 and 52 (5.145)
8 815-8 965 KHz AERONAUTICAL MOBILE (R)	**8 815-8 965 KHz** AERONAUTICAL MOBILE (R) **BHR4**		
8 965-9 040 KHz AERONAUTICAL MOBILE (OR)	**8 965-9 040 KHz** AERONAUTICAL MOBILE (OR) **BHR4**		
9 040-9 305 KHz FIXED	**9 040-9 305 KHz** FIXED **BHR4**		
9 305-9 355 KHz FIXED Radiolocation *5.145A* 5.145B	**9 305-9 355 KHz** FIXED Radiolocation **BHR4**		
9 355-9 400 KHz FIXED	**9 355-9 400 KHz** FIXED **BHR4**		
9 400-9 500 KHz BROADCASTING *5.134* *5.146*	**9 400-9 500 KHz** BROADCASTING **BHR4**		Refer to the ITU Radio Regulation Article 12
9 500-9 900 KHz BROADCASTING *5.147*	**9 500-9 900 KHz** BROADCASTING **BHR4**		Refer to the ITU Radio Regulation Article 12
9 900-9 995 KHz FIXED	**9 900-9 995 KHz** FIXED **BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
9 995-10 003 KHz	**9 995-10 003 KHz**		Refer to the ITU Radio Regulation Article 26
STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz)		
5.111	**BHR4**		
10 003-10 005 KHz	**10 003-10 005 KHz**		Refer to the ITU Radio Regulation Article 26
STANDARD FREQUENCY AND TIME SIGNAL	STANDARD FREQUENCY AND TIME SIGNAL		
Space research	Space research		
5.111	**BHR4**		
10 005-10 100 KHz	**10 005-10 100 KHz**		
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		
5.111	**BHR4**		
10 100-10 150 KHz	**10 100-10 150 KHz**	FIXED	Maximum power for Amateur is 400W (e.i.r.p).
FIXED	FIXED		
Amateur	Amateur **BHR2**		
	BHR4		
10 150-11 175 KHz	**10 150-11 175 KHz**	FIXED	(10200-11000 KHz) Inductive Systems
FIXED	FIXED		
Mobile except aeronautical mobile (R)	Mobile except aeronautical mobile (R)		
	BHR4		
11 175-11 275 KHz	**11 175-11 275 KHz**		
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		
	BHR4		
11 275-11 400 KHz	**11 275-11 400 KHz**		
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		
	BHR4		
11 400-11 600 KHz	**11 400-11 600 KHz**		
FIXED	FIXED		
	BHR4		
11 600-11 650 KHz	**11 600-11 650 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING *5.134*	BROADCASTING		
5.146	**BHR4**		
11 650-12 050 KHz	**11 650-12 050 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING	BROADCASTING		
5.147	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
12 050-12 100 KHz	**12 050-12 100 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING *5.134*	BROADCASTING		
5.146	**BHR4**		
12 100-12 230 KHz	**12 100-12 230 KHz**		
FIXED	FIXED		
	BHR4		
12 230-13 200 KHz	**12 230-13 200 KHz**	12 290 KHz for Distress and Safety 12 520 KHz for Distress 12 577 KHz for Distress for digital selective Calling 12 579 kHz for maritime safety information (MSI)	The conditions for the use of 12 520 kHz are prescribed in Articles 31 (5.110) The conditions for the use of 12 577 KHz are prescribed in Article 31 (5.109) The conditions for the use of the carrier frequency 12 290 kHz is prescribed in Articles 31 and 52 (5.145)
MARITIME MOBILE *5.109* *5.110* *5.132* *5.145*	MARITIME MOBILE		
	BHR4		
13 200-13 260 KHz	**13 200-13 260 KHz**		
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		
	BHR4		
13 260-13 360 KHz	**13 260-13 360 KHz**		
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		
	BHR4		
13 360-13 410 KHz	**13 360-13 410 KHz**	FIXED	
FIXED	FIXED		
RADIO ASTRONOMY	RADIO ASTRONOMY		
5.149	**BHR4**		
13 410-13 450 KHz	**13 410-13 450 KHz**		
FIXED	FIXED		
Mobile except aeronautical mobile (R)	Mobile except aeronautical mobile (R)		
	BHR4		
13 450-13 550 KHz	**13 450-13 550 KHz**		
FIXED	FIXED		
Mobile except aeronautical mobile (R)	Mobile except aeronautical mobile (R)		
Radiolocation *5.132A*	Radiolocation		
5.149A	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
13 550-13 570 KHz	**13 550-13 570 KHz**	Mobile except aeronautical mobile (R)	
FIXED	FIXED		
Mobile except aeronautical mobile (R)	Mobile except aeronautical mobile (R)		
5.150	**BHR4**		
13 570-13 600 KHz	**13 570-13 600 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING ***5.134***	BROADCASTING		
5.151	**BHR4**		
13 600-13 800 KHz	**13 600-13 800 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING	BROADCASTING		
	BHR4		
13 800-13 870 KHz	**13 800-13 870 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING ***5.134***	BROADCASTING		
5.151	**BHR4**		
13 870-14 000 KHz	**13 870-14 000 KHz**		
FIXED	FIXED		
Mobile except aeronautical mobile (R)	Mobile except aeronautical mobile (R)		
	BHR4		
14 000-14 250 KHz	**14 000-14 250 KHz**		Maximum power for Amateur is 400W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
AMATEUR-SATELLITE	AMATEUR-SATELLITE		
	BHR4		
14 250-14 350 KHz	**14 250-14 350 KHz**		Maximum power for Amateur is 400W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
5.152	**BHR4**		
14 350-14 990 KHz	**14 350-14 990 KHz**		
FIXED	FIXED		
Mobile except aeronautical mobile (R)	Mobile except aeronautical mobile (R)		
	BHR4		
14 990-15 005 KHz	**14 990-15 005 KHz**		Refer to the ITU Radio Regulation Article 26
STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (15 000 kHz)		
5.111	**BHR4**		
15 005-15 010 KHz	**15 005-15 010 KHz**		Refer to the ITU Radio Regulation Article 26
STANDARD FREQUENCY AND TIME SIGNAL	STANDARD FREQUENCY AND TIME SIGNAL		
Space research	Space research		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
15 010-15 100 KHz	**15 010-15 100 KHz**		
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		
	BHR4		
15 100-15 600 KHz	**15 100-15 600 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING	BROADCASTING		
	BHR4		
15 600-15 800 KHz	**15 600-15 800 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING ***5.134***	BROADCASTING		
5.146	**BHR4**		
15 800-16 100 KHz	**15 800-16 100 KHz**		
FIXED	FIXED		
5.153	**BHR4**		
16 100-16 200 KHz	**16 100-16 200 KHz**		
FIXED	FIXED		
Radiolocation ***5.145A***	Radiolocation		
5.145B	**BHR4**		
16 200-16 360 KHz	**16 200-16 360 KHz**		
FIXED	FIXED		
	BHR4		
16 360-17 410 KHz	**16 360-17 410 KHz**	16 420 KHz for Distress and Safety 16 695 KHz for Distress 16 804.5 KHz for Distress for digital selective Calling 16 806.5 kHz for maritime safety information (MSI)	The conditions for the use of 16 695 kHz are prescribed in Articles 31 (5.110) The conditions for the use of 16 804.5 KHz are prescribed in Article 31 (5.109) The conditions for the use of the carrier frequency 16 420 kHz is prescribed in Articles 31 and 52 (5.145)
MARITIME MOBILE ***5.109*** ***5.110*** ***5.132*** ***5.145***	MARITIME MOBILE		
	BHR4		
17 410-17 480 KHz	**17 410-17 480 KHz**		
FIXED	FIXED		
	BHR4		
17 480-17 550 KHz	**17 480-17 550 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING ***5.134***	BROADCASTING		
5.146	**BHR4**		
17 550-17 900 KHz	**17 550-17 900 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING	BROADCASTING		
	BHR4		
17 900-17 970 KHz	**17 900-17 970 KHz**		
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
17 970-18 030 KHz	**17 970-18 030 KHz**		
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		
	BHR4		
18 030-18 052 KHz	**18 030-18 052 KHz**		
FIXED	FIXED		
	BHR4		
18 052-18 068 KHz	**18 052-18 068 KHz**	FIXED	
FIXED	FIXED		
Space research	Space research		
	BHR4		
18 068-18 168 KHz	**18 068-18 168 KHz**		Maximum power for Amateur is 400W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
AMATEUR-SATELLITE	AMATEUR-SATELLITE		
5.154	**BHR4**		
18 168-18 780 KHz	**18 168-18 780 KHz**	FIXED	
FIXED	FIXED		
Mobile except aeronautical mobile	Mobile except aeronautical mobile		
	BHR4		
18 780-18 900 KHz	**18 780-18 900 KHz**		
MARITIME MOBILE	MARITIME MOBILE		
	BHR4		
18 900-19 020 KHz	**18 900-19 020 KHz**		Refer to the ITU Radio Regulation Article 12
BROADCASTING ***5.134***	BROADCASTING		
5.146	**BHR4**		
19 020-19 680 KHz	**19 020-19 680 KHz**		
FIXED	FIXED		
	BHR4		
19 680-19 800 KHz	**19 680-19 800 KHz**	19 680.5 kHz for maritime safety information (MSI)	
MARITIME MOBILE ***5.132***	MARITIME MOBILE		
	BHR4		
19 800-19 990 KHz	**19 800-19 990 KHz**		
FIXED	FIXED		
	BHR4		
19 990-19 995 KHz	**19 990-19 995 KHz**		Refer to the ITU Radio Regulation Article 26
STANDARD FREQUENCY AND TIME SIGNAL	STANDARD FREQUENCY AND TIME SIGNAL		
Space research	Space research		
5.111	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
19 995-20 010 KHz	**19 995-20 010 KHz**		Refer to the ITU Radio Regulation Article 26
STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (20 000 kHz)		
5.111	**BHR4**		
20 010-21 000 KHz	**20 010-21 000 KHz**		
FIXED	FIXED		
Mobile	Mobile		
	BHR4		
21 000-21 450 KHz	**21 000-21 450 KHz**		Maximum power for Amateur is 400W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
AMATEUR-SATELLITE	AMATEUR-SATELLITE		
	BHR4		
21 450-21 850 KHz	**21 450-21 850 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING	BROADCASTING		
	BHR4		
21 850-21 870 KHz	**21 850-21 870 KHz**		
FIXED 5.155A	FIXED		
5.155	**BHR4**		
21 870-21 924 KHz	**21 870-21 924 KHz**		
FIXED ***5.155B***	FIXED		
	BHR4		
21 924-22 000 KHz	**21 924-22 000 KHz**		
AERONAUTICAL MOBILE (R)	AERONAUTICAL MOBILE (R)		
	BHR4		
22 000-22 855 KHz	**22 000-22 855 KHz**	22 376 kHz for maritime safety information (MSI)	
MARITIME MOBILE ***5.132***	MARITIME MOBILE		
5.156	**BHR4**		
22 855-23 000 KHz	**22 855-23 000 KHz**		
FIXED	FIXED		
5.156	**BHR4**		
23 000-23 200 KHz	**23 000-23 200 KHz**		
FIXED	FIXED		
Mobile except aeronautical mobile (R)	Mobile except aeronautical mobile (R)		
5.156	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
23 200-23 350 KHz	**23 200-23 350 KHz**		
FIXED *5.156A*	FIXED		
AERONAUTICAL MOBILE (OR)	AERONAUTICAL MOBILE (OR)		
	BHR4		
23 350-24 000 KHz	**23 350-24 000 KHz**	FIXED	
FIXED	FIXED		
MOBILE except aeronautical mobile *5.157*	MOBILE except aeronautical mobile		
	BHR4		
24 000-24 450 KHz	**24 000-24 450 KHz**	FIXED	
FIXED	FIXED		
LAND MOBILE	LAND MOBILE		
	BHR4		
24 450-24 600 KHz	**24 450-24 600 KHz**	FIXED	
FIXED	FIXED		
LAND MOBILE	LAND MOBILE		
Radiolocation *5.132A*	Radiolocation		
5.158	**BHR4**		
24 600-24 890 KHz	**24 600-24 890 KHz**	FIXED	
FIXED	FIXED		
LAND MOBILE	LAND MOBILE		
	BHR4		
24 890-24 990 KHz	**24 890-24 990 KHz**		Maximum power for Amateur is 400W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
AMATEUR-SATELLITE	AMATEUR-SATELLITE		
	BHR4		
24 990-25 005 KHz	**24 990-25 005 KHz**		Refer to the ITU Radio Regulation Article 26
STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)	STANDARD FREQUENCY AND TIME SIGNAL (25 000 kHz)		
	BHR4		
25 005-25 010 KHz	**25 005-25 010 KHz**		Refer to the ITU Radio Regulation Article 26
STANDARD FREQUENCY AND TIME SIGNAL	STANDARD FREQUENCY AND TIME SIGNAL		
Space research	Space research		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
25 010-25 070 KHz	**25 010-25 070 KHz**		
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
	BHR4		
25 070-25 210 KHz	**25 070-25 210 KHz**		
MARITIME MOBILE	MARITIME MOBILE		
	BHR4		
25 210-25 550 KHz	**25 210-25 550 KHz**		
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
	BHR4		
25 550-25 670 KHz	**25 550-25 670 KHz**		
RADIO ASTRONOMY	RADIO ASTRONOMY		
5.149	**BHR4**		
25 670-26 100 KHz	**25 670-26 100 KHz**	HF Broadcasting	Refer to the ITU Radio Regulation Article 12
BROADCASTING	BROADCASTING		
	BHR4		
26 100-26 175 KHz	**26 100-26 175 KHz**	26 100.5 kHz for maritime safety information (MSI)	
MARITIME MOBILE ***5.132***	MARITIME MOBILE		
	BHR4		
26 175-26 200 KHz	**26 175-26 200 KHz**		
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
	BHR4		
26 200-26 350 KHz	**26 200-26 350 KHz**		
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
Radiolocation ***5.132A***	Radiolocation		
5.133A	**BHR4**		
26 350-27 500 KHz	**26 350-27 500 KHz**	(26957-27283 KHz) Inductive Systems	
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
5.150	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
27 500-28 000 KHz	**27 500-28 000 KHz**	FIXED	
METEOROLOGICAL AIDS	METEOROLOGICAL AIDS	MOBILE	
FIXED	FIXED		
MOBILE	MOBILE		
	BHR4		
28 000-29 700 KHz	**28 000-29 700 KHz**		Maximum power for Amateur is 500W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
AMATEUR-SATELLITE	AMATEUR-SATELLITE		
	BHR4		
29 700-30 005 KHz	**29 700-30 005 KHz**		
FIXED	FIXED		
MOBILE	MOBILE		
	BHR4		
30.005-30.01 MHz	**30.005-30.01 MHz**		
SPACE OPERATION (satellite identification)	SPACE OPERATION (satellite identification)		
FIXED	FIXED		
MOBILE	MOBILE		
SPACE RESEARCH	SPACE RESEARCH		
	BHR4		
30.01-37.5 MHz	**30.01-37.5 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
	BHR4		
37.5-38.25 MHz	**37.5-38.25 MHz**	MOBILE	
FIXED	FIXED		
MOBILE	MOBILE		
Radio astronomy	Radio astronomy		
5.149	**BHR4**		
38.25-39 MHz	**38.25-39 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
	BHR4		
39-39.5 MHz	**39-39.5 MHz**	MOBILE	
FIXED	FIXED		
MOBILE	MOBILE		
Radiolocation ***5.132A***	Radiolocation		
5.159	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
39.5-39.986 MHz	**39.5-39.986 MHz**	MOBILE	
FIXED	FIXED		
MOBILE	MOBILE		
	BHR4		
39.986-40.02 MHz	**39.986-40.02 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
Space research	Space research		
	BHR4		
40.02-40.98 MHz	**40.02-40.98 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
5.150	**BHR4**		
40.98-41.015 MHz	**40.98-41.015 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
Space research	Space research		
5.160 5.161	**BHR4**		
41.015-42 MHz	**41.015-42 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
5.160 5.161 5.161A	**BHR4**		
42-42.5 MHz	**42-42.5 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
Radiolocation ***5.132A***	Radiolocation		
5.160 5.161B	**BHR4**		
42.5-44 MHz	**42.5-44 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
5.160 5.161 5.161A	**BHR4**		
44-47 MHz	**44-47 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
5.162 5.162A	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
47-68 MHz	**47-50 MHz**		Refer to the ITU GE89 Plan
BROADCASTING	BROADCASTING		
5.162A 5.163 5.164 5.165 5.169 5.171	**BHR4**		
	50-52 MHz		For Broadcasting refer to the ITU GE89 Plan
	BROADCASTING		
	Amateur **BHR1 BHR2**		Maximum power for Amateur is 100W (e.i.r.p)
	52-68 MHz		Refer to the ITU GE89 Plan
	BROADCASTING		
68-74.8 MHz	**68-69.9 MHz**		
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
5.149 5.175 5.177 5.179	**69.9-70.4 MHz**		Maximum power for Amateur is 50W (e.i.r.p).
	FIXED		
	MOBILE except aeronautical mobile		
	Amateur **BHR1 BHR2**		
	70.4-74.8 MHz		
	FIXED		
	MOBILE except aeronautical mobile		
74.8-75.2 MHz	**74.8-75.2 MHz**		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
5.180 5.181			
75.2-87.5 MHz	**75.2-87.5 MHz**		
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
5.175 5.179 5.187			
87.5-100 MHz	**87.5-100 MHz**	FM Broadcasting	Refer to the ITU GE84 Plan
BROADCASTING	BROADCASTING		
5.190	**BHR4**		
100-108 MHz	**100-108 MHz**	FM Broadcasting	Refer to the ITU GE84 Plan
BROADCASTING	BROADCASTING		
5.192 5.194	**BHR4**		
108-117.975 MHz	**108-117.975 MHz**		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
5.197 ***5.197A***			

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
117.975-137 MHz AERONAUTICAL MOBILE (R) ***5.111*** ***5.200*** 5.201 ***5.202***	**117.975-137 MHz** AERONAUTICAL MOBILE (R)	121.5 MHz for aeronautical emergency	121.5 MHz is the aeronautical emergency frequency and, where required, the frequency 123.1 MHz is the aeronautical frequency auxiliary to 121.5 MHz. Mobile stations of the maritime mobile service may communicate on these frequencies under the conditions laid down in Article 31 for distress and safety purposes with stations of the aeronautical mobile service (5.200)
137-137.025 MHz SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) ***5.208A*** ***5.208B*** ***5.209*** SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) ***5.204*** 5.205 5.206 5.207 ***5.208***	**137-137.025 MHz** SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) FIXED MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)	
137.025-137.175 MHz SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) Mobile-satellite (space-to-Earth) ***5.208A*** ***5.208B*** ***5.209*** ***5.204*** 5.205 5.206 5.207 ***5.208***	**137.025-137.175 MHz** SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) FIXED MOBILE except aeronautical mobile (R) Mobile-satellite (space-to-Earth)		
137.175-137.825 MHz SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) ***5.208A*** ***5.208B*** ***5.209*** SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) ***5.204*** 5.205 5.206 5.207 ***5.208***	**137.175-137.825 MHz** SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) FIXED MOBILE except aeronautical mobile (R)		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
137.825-138 MHz SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) Fixed Mobile except aeronautical mobile (R) Mobile-satellite (space-to-Earth) ***5.208A 5.208B 5.209*** ***5.204*** 5.205 5.206 5.207 ***5.208***	**137.825-138 MHz** SPACE OPERATION (space-to-Earth) METEOROLOGICAL-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) FIXED MOBILE except aeronautical mobile (R) Mobile-satellite (space-to-Earth)		
138-143.6 MHz AERONAUTICAL MOBILE (OR) 5.210 ***5.211*** 5.212 5.214	**138-143.6 MHz** AERONAUTICAL MOBILE (OR) MARITIME MOBILE LAND MOBILE **BHR4**		
143.6-143.65 MHz AERONAUTICAL MOBILE (OR) SPACE RESEARCH (space-to-Earth) ***5.211*** 5.212 5.214	**143.6-143.65 MHz** AERONAUTICAL MOBILE (OR) SPACE RESEARCH (space-to-Earth) MARITIME MOBILE LAND MOBILE		
143.65-144 MHz AERONAUTICAL MOBILE (OR) 5.210 ***5.211*** 5.212 5.214	**143.65-144 MHz** AERONAUTICAL MOBILE (OR) MARITIME MOBILE LAND MOBILE		
144-146 MHz AMATEUR AMATEUR-SATELLITE 5.216	**144-146 MHz** AMATEUR **BHR2** AMATEUR-SATELLITE		Maximum power for Amateur is 100W (e.i.r.p).
146-148 MHz FIXED MOBILE except aeronautical mobile (R)	**146-148 MHz** FIXED MOBILE except aeronautical mobile (R)	MOBILE except aeronautical mobile (R)	PMR

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
148-149.9 MHz FIXED MOBILE except aeronautical mobile (R) MOBILE-SATELLITE (Earth-to-space) ***5.209 5.218 5.219 5.221***	**148-149.9 MHz** FIXED MOBILE except aeronautical mobile (R) MOBILE-SATELLITE (Earth-to-space)	MOBILE except aeronautical mobile (R)	PMR
149.9-150.05 MHz MOBILE-SATELLITE (Earth-to-space) ***5.209*** ***5.220***	**149.9-150.05 MHz** MOBILE-SATELLITE (Earth-to-space)		
150.05-153 MHz FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY ***5.149***	**150.05-153 MHz** FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY	MOBILE except aeronautical mobile	PMR
153-154 MHz FIXED MOBILE except aeronautical mobile (R) Meteorological aids	**153-154 MHz** FIXED MOBILE except aeronautical mobile (R) Meteorological aids	MOBILE except aeronautical mobile (R)	PMR
154-156.4875 MHz FIXED MOBILE except aeronautical mobile (R) 5.225A ***5.226***	**154-156.4875 MHz** FIXED MOBILE except aeronautical mobile (R)	From156.025 MHz VHF maritime mobile band channels	Standard Maritime channels according to Appendix 18.
156.4875-156.5625 MHz MARITIME MOBILE (distress and calling via DSC) ***5.111 5.226 5.227***	**156.4875-156.5625 MHz** MARITIME MOBILE (distress and calling via DSC)	156.525 MHz for Distress, Safety and Calling (DSC)	Standard Maritime channels according to Appendix 18. The conditions for the use of the frequency 156.525 MHz and the band 156.4875-156.5625 MHz are contained in Articles 31 and 52, and in Appendix 18.
156.5625-156.7625 MHz FIXED MOBILE except aeronautical mobile (R) ***5.226***	**156.5625-156.7625 MHz** FIXED MOBILE except aeronautical mobile (R)		Standard Maritime channels according to Appendix 18.
156.7625-156.7875 MHz MARITIME MOBILE Mobile-satellite (Earth-to-space) ***5.111 5.226 5.228***	**156.7625-156.7875 MHz** MARITIME MOBILE Mobile-satellite (Earth-to-space)	MARITIME MOBILE	Standard Maritime channels according to Appendix 18.
156.7875-156.8125 MHz MARITIME MOBILE (distress and calling) ***5.111 5.226***	**156.7875-156.8125 MHz** MARITIME MOBILE (distress and calling)	156.8 MHz for Distress, Safety and Calling (DSC)	Standard Maritime channels according to Appendix 18.

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
156.8125-156.8375 MHz MARITIME MOBILE Mobile-satellite (Earth-to-space) ***5.111 5.226 5.228***	**156.8125-156.8375 MHz** MARITIME MOBILE Mobile-satellite (Earth-to-space)		Standard Maritime channels according to Appendix 18.
156.8375-161.9375 MHz FIXED MOBILE except aeronautical mobile ***5.226***	**156.8375-161.9375 MHz** FIXED MOBILE except aeronautical mobile		Standard Maritime channels according to Appendix 18.
161.9375-161.9625 MHz FIXED MOBILE except aeronautical mobile Maritime mobile-satellite (Earth-to-space) ***5.228AA*** ***5.226***	**161.9375-161.9625 MHz** FIXED MOBILE except aeronautical mobile Maritime mobile-satellite (Earth-to-space)		Standard Maritime channels according to Appendix 18.
161.9625-161.9875 MHz FIXED MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) ***5.228F 5.226 5.228A 5.228B***	**161.9625-161.9875 MHz** FIXED MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space)		Standard Maritime channels according to Appendix 18.
161.9875-162.0125 MHz FIXED MOBILE except aeronautical mobile Maritime mobile-satellite (Earth-to-space) ***5.228AA*** ***5.226*** 5.229	**161.9875-162.0125 MHz** FIXED MOBILE except aeronautical mobile Maritime mobile-satellite (Earth-to-space)		Standard Maritime channels according to Appendix 18.
162.0125-162.0375 MHz FIXED MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) ***5.228F*** ***5.226 5.228A 5.228B*** 5.229	**162.0125-162.0375 MHz** FIXED MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space)		Standard Maritime channels according to Appendix 18.
162.0375-174 MHz FIXED MOBILE except aeronautical mobile ***5.226*** 5.229	**162.0375-174 MHz** FIXED MOBILE except aeronautical mobile **BHR4**		
174-223 MHz BROADCASTING	**174-223 MHz** BROADCASTING **BHR4**	Broadcasting Band III DAB	Refer to the ITU GE06 Plan SAB

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
223-230 MHz	**223-230 MHz**	Broadcasting Band III DAB	For Broadcasting refer to the ITU GE06 Plan
BROADCASTING	BROADCASTING		SAB
Fixed	AERONAUTICAL RADIONAVIGATION		
Mobile	Fixed		
5.243 5.246 ***5.247***	Mobile		
230-235 MHz	**230-235 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
5.247 5.251 5.252	AERONAUTICAL RADIONAVIGATION		
	BHR4		
235-267 MHz	**235-267 MHz**	243 MHz for survival craft stations and equipment used for survival purposes	
FIXED	FIXED		
MOBILE	MOBILE		
5.111 5.252 ***5.254*** ***5.256*** 5.256A	**BHR4**		
267-272 MHz	**267-272 MHz**	FIXED	
FIXED	FIXED	MOBILE	
MOBILE	MOBILE		
Space operation (space-to-Earth)	Space operation (space-to-Earth)		
5.254 ***5.257***	**BHR4**		
272-273 MHz	**272-273 MHz**		
SPACE OPERATION (space-to-Earth)	SPACE OPERATION (space-to-Earth)		
FIXED	FIXED		
MOBILE	MOBILE		
5.254	**BHR4**		
273-312 MHz	**273-312 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
5.254	**BHR 4**		
312-315 MHz	**312-315 MHz**		315 MHz Bahrain keyless system
FIXED	FIXED		
MOBILE	MOBILE		
Mobile-satellite (Earth-to-space) ***5.254*** ***5.255***	Mobile-satellite (Earth-to-space)		
	BHR 4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
315-322 MHz	**315-322 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
5.254	**BHR 4**		
322-328.6 MHz	**322-328.6 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
5.149	**BHR4**		
328.6-335.4 MHz	**328.6-335.4 MHz**		
AERONAUTICAL RADIONAVIGATION ***5.258***	AERONAUTICAL RADIONAVIGATION		
5.259	**BHR4**		
335.4-387 MHz	**335.4-387 MHz**		380-385 MHz paired with 390-395 MHz are harmonized PPDR for GCC and other R1 countries
FIXED	FIXED		
MOBILE	MOBILE		
5.254	**BHR4**		
387-390 MHz	**387-390 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
Mobile-satellite (space-to-Earth) ***5.208A 5.208B 5.254 5.255***	**BHR4**		
390-399.9 MHz	**390-399.9 MHz**		390-395 MHz paired with 380-385 MHz are harmonized PPDR for GCC and other R1 countries
FIXED	FIXED		
MOBILE	MOBILE		
5.254	**BHR4**		
399.9-400.05 MHz	**399.9-400.05 MHz**		
MOBILE-SATELLITE (Earth-to-space) ***5.209***	MOBILE-SATELLITE (Earth-to-space)		
5.220	**BHR4**		
400.05-400.15 MHz	**400.05-400.15 MHz**		Refer to the ITU Radio Regulation Article 26
STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz)	STANDARD FREQUENCY AND TIME SIGNAL-SATELLITE (400.1 MHz)		
5.261 5.262	FIXED		
	MOBILE		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
400.15-401 MHz METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) ***5.208A*** ***5.208B*** ***5.209*** SPACE RESEARCH (space-to-Earth) ***5.263*** Space operation (space-to-Earth) ***5.262*** ***5.264***	**400.15-401 MHz** METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) SPACE RESEARCH (space-to-Earth) FIXED MOBILE Space operation (space-to-Earth) **BHR4**	MOBILE	
401-402 MHz METEOROLOGICAL AIDS SPACE OPERATION (space-to-Earth) EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile	**401-402 MHz** METEOROLOGICAL AIDS SPACE OPERATION (space-to-Earth) EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile **BHR4**	Mobile except aeronautical mobile	
402-403 MHz METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile	**402-403 MHz** METEOROLOGICAL AIDS EARTH EXPLORATION-SATELLITE (Earth-to-space) METEOROLOGICAL-SATELLITE (Earth-to-space) Fixed Mobile except aeronautical mobile **BHR4**	Mobile except aeronautical mobile	
403-406 MHz METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile **5.265**	**403-406 MHz** METEOROLOGICAL AIDS Fixed Mobile except aeronautical mobile **BHR4**	Mobile except aeronautical mobile	PMR Resolve 1 in Resolution 205 (Rev.WRC-15) to request administrations not to make new frequency assignments within the frequency bands **405.9-406.0 MHz and 406.1-406.2 MHz** under the mobile and fixed services.

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
406-406.1 MHz MOBILE-SATELLITE (Earth-to-space) ***5.265*** ***5.266*** ***5.267***	**406-406.1 MHz** MOBILE-SATELLITE (Earth-to-space) **BHR4**	COSPAS-SARSAT Mobile-satellite service is limited to low power satellite emergency position-indicating radiobeacons	Resolve 1 in Resolution 205 (Rev.WRC-15) to request administrations not to make new frequency assignments within the frequency bands **405.9-406.0 MHz and 406.1-406.2 MHz** under the mobile and fixed services
406.1-410 MHz FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY ***5.149*** ***5.265***	**406.1-410 MHz** FIXED MOBILE except aeronautical mobile RADIO ASTRONOMY **BHR4**	FIXED MOBILE except aeronautical mobile	PMR Resolve 1 in Resolution 205 (Rev.WRC-15) to request administrations not to make new frequency assignments within the frequency bands **405.9-406.0 MHz and 406.1-406.2 MHz** under the mobile and fixed services
410-420 MHz FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-space) ***5.268***	**410-420 MHz** FIXED MOBILE except aeronautical mobile SPACE RESEARCH (space-to-space) **BHR4**	FIXED MOBILE except aeronautical mobile	PMR
420-430 MHz FIXED MOBILE except aeronautical mobile Radiolocation 5.269 5.270 5.271	**420-430 MHz** FIXED MOBILE except aeronautical mobile **BHR4**		PMR
430-432 MHz AMATEUR RADIOLOCATION 5.271 5.272 5.273 5.274 5.275 ***5.276*** 5.277	**430-432 MHz** AMATEUR **BHR2** FIXED MOBILE except aeronautical mobile **BHR 4**		PMR Maximum power for Amateur is 25W (e.i.r.p). AMATEUR 430.2 MHz and 431.2 MHz
432-438 MHz AMATEUR RADIOLOCATION Earth exploration-satellite (active) ***5.279A*** ***5.138*** 5.271 5.272 ***5.276*** 5.277 5.280 5.281 ***5.282***	**432-435 MHz** FIXED MOBILE except aeronautical mobile Earth exploration-satellite (active) **BHR4** **435-438 MHz** FIXED MOBILE except aeronautical mobile **BHR1** Earth exploration-satellite (active) **BHR4**	FIXED MOBILE except aeronautical mobile	PMR 435 – 438 MHz utilized to be used for Mobile except aeronautical mobile in Bahrain

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
438-440 MHz	**438-440 MHz**		PMR
AMATEUR	FIXED		
RADIOLOCATION	MOBILE except aeronautical mobile		
5.271 5.273 5.274 5.275 ***5.276*** 5.277 5.283	**BHR4**		
440-450 MHz	**440-450 MHz**		PMR
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
Radiolocation	**BHR4**		
5.269 5.270 5.271 5.284 5.285 ***5.286***			
450-455 MHz	**450-455 MHz**		PMR
FIXED	FIXED		
MOBILE ***5.286AA***	MOBILE		
5.209 5.271 ***5.286*** ***5.286A*** 5.286B 5.286C 5.286D 5.286E	**BHR4**		
455-456 MHz	**455-456 MHz**		PMR
FIXED	FIXED		
MOBILE ***5.286AA***	MOBILE		
5.209 5.271 ***5.286A*** 5.286B 5.286C 5.286E	**BHR4**		
456-459 MHz	**456-459 MHz**		PMR
FIXED	FIXED		
MOBILE ***5.286AA***	MOBILE		
5.271 ***5.287*** 5.288	**BHR4**		
459-460 MHz	**459-460 MHz**		PMR
FIXED	FIXED		
MOBILE	MOBILE		
5.286AA ***5.209*** 5.271 ***5.286A*** 5.286B 5.286C 5.286E	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
460-470 MHz FIXED MOBILE ***5.286AA*** Meteorological-satellite (space-to-Earth) ***5.287*** 5.288 ***5.289*** 5.290	**460-470 MHz** FIXED MOBILE Meteorological-satellite (space-to-Earth) **BHR4**		PMR
470-694 MHz BROADCASTING ***5.149*** 5.291A ***5.294*** ***5.296*** ***5.300*** 5.304 5.306 ***5.311A*** 5.312	**470-694 MHz** BROADCASTING Land mobile **BHR4**	Broadcasting digital TV GE06 Plan	Land mobile for the applications ancillary to broadcasting and programme-making. For Broadcasting refer to the ITU GE06 Plan SAB - SAP
694-790 MHz MOBILE except aeronautical mobile ***5.312A*** ***5.317A*** BROADCASTING ***5.300*** ***5.311A*** 5.312	**694-790 MHz** MOBILE except aeronautical mobile **BHR4**	New IMT Band Portion of this band is allocated for PPDR	This service is subject to the provisions of Resolution 232 (WRC-12). See also Resolution 224 (Rev.WRC-12) (5.312A)

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
790-862 MHz FIXED MOBILE except aeronautical mobile ***5.316B*** ***5.317A*** BROADCASTING 5.312 5.319	**790-862 MHz** MOBILE except aeronautical mobile **BHR4**	New IMT Band	Can be used subject to agreement obtained under No. 9.21 with respect to the aeronautical radionavigation service in countries mentioned in No. 5.312. For countries party to the GE06 Agreement, the use of stations of the mobile service is also subject to the successful application of the procedures of that greement. Resolutions 224 (Rev.WRC-12) and 749 (Rev.WRC-12) shall apply, as appropriate (5.316B)
862-890 MHz FIXED MOBILE except aeronautical mobile ***5.317A*** BROADCASTING 5.322 5.319 5.323	**862-890 MHz** MOBILE except aeronautical mobile **BHR4**	IMT Band	SRD 863-870 MHz GCC harmonized Railways 876-880 paired with 921-925 MHz 880-915 paired with 925-960 MHz

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
890-942 MHz FIXED MOBILE except aeronautical mobile ***5.317A*** BROADCASTING 5.322 Radiolocation 5.323	**890-942 MHz** MOBILE except aeronautical mobile **BHR4**	IMT	GCC harmonized Railways 876-880 paired with 921-925 MHz 880-915 paired with 925-960 MHz
942-960 MHz FIXED MOBILE except aeronautical mobile ***5.317A*** BROADCASTING 5.322 5.323	**942-960 MHz** MOBILE except aeronautical mobile **BHR4**	IMT	880-915 paired with 925-960 MHz
960-1 164 MHz AERONAUTICAL MOBILE (R) ***5.327A*** AERONAUTICAL RADIONAVIGATION ***5.328*** ***5.328AA***	**960-1 164 MHz** AERONAUTICAL MOBILE (R) AERONAUTICAL RADIONAVIGATION **BHR4**		DME landing\ground reply\interrogation
1 164-1 215 MHz AERONAUTICAL RADIONAVIGATION ***5.328*** RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) ***5.328B*** ***5.328A***	**1 164-1 215 MHz** AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) **BHR4**		DME landing\ground reply\interrogation
1 215-1 240 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) ***5.328B*** ***5.329*** ***5.329A*** SPACE RESEARCH (active) ***5.330*** ***5.331*** ***5.332***	**1 215-1 240 MHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) SPACE RESEARCH (active) FIXED MOBILE RADIONAVIGATION **BHR4**		
1 240-1 300 MHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION	**1 240-1 300 MHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION		Maximum power for Amateur is 100W (e.i.r.p). Amateur in the band 1296-1296.4 MHz only

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) ***5.328B*** ***5.329*** ***5.329A***	RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space)		
SPACE RESEARCH (active)	SPACE RESEARCH (active)		
Amateur	FIXED		
5.282 ***5.330*** ***5.331*** ***5.332*** 5.335 ***5.335A***	MOBILE		
	RADIONAVIGATION		
	Amateur **BHR2**		
	BHR4		
1 300-1 350 MHz	**1 300-1 350 MHz**		
RADIOLOCATION	RADIOLOCATION		
AERONAUTICAL RADIONAVIGATION ***5.337***	AERONAUTICAL RADIONAVIGATION		
RADIONAVIGATION-SATELLITE (Earth-to-space)	RADIONAVIGATION-SATELLITE (Earth-to-space)		
5.149 ***5.337A***	**BHR4**		
1 350-1 400 MHz	**1 350-1 400 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
RADIOLOCATION	RADIOLOCATION		
5.149 5.338 ***5.338A*** ***5.339***	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
1 400-1 427 MHz	**1 400-1 427 MHz**	Passive Band	
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340 ***5.341***	**BHR4**		
1 427-1 429 MHz	**1 427-1 429 MHz**	IMT	Identified as IMT Band in accordance with Resolution 223 (Rev.WRC-15) with applying the conditions mentioned in 5.341A
SPACE OPERATION (Earth-to-space)	FIXED		
FIXED	MOBILE except aeronautical mobile		
MOBILE except aeronautical mobile ***5.341A*** 5.341B 5.341C	**BHR4**		
5.338A ***5.341***			
1 429-1 452 MHz	**1 429-1 452 MHz**	IMT	Identified as IMT Band in accordance with Resolution 223 (Rev.WRC-15) with

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
FIXED MOBILE except aeronautical mobile ***5.341A*** ***5.338A*** ***5.341*** 5.342	FIXED MOBILE except aeronautical mobile **BHR4**		applying the conditions mentioned in 5.341A
1 452-1 492 MHz FIXED MOBILE except aeronautical mobile ***5.346*** BROADCASTING BROADCASTING-SATELLITE ***5.208B*** ***5.341*** 5.342 ***5.345***	**1 452-1 492 MHz** FIXED MOBILE except aeronautical mobile **BHR4**	IMT	Identified as IMT Band in accordance with Resolution 223 (Rev.WRC-15) with applying the conditions mentioned in 5.346
1 492-1 518 MHz FIXED MOBILE except aeronautical mobile ***5.341A*** ***5.341*** 5.342	**1 492-1 518 MHz** FIXED MOBILE except aeronautical mobile **BHR4**	IMT	Identified as IMT Band in accordance with Resolution 223 (Rev.WRC-15) with applying the conditions mentioned in 5.341A
1 518-1 525 MHz FIXED MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth) ***5.348*** ***5.348A*** ***5.348B*** ***5.351A*** ***5.341*** 5.342	**1 518-1 525 MHz** FIXED MOBILE except aeronautical mobile MOBILE-SATELLITE (space-to-Earth) **BHR4**		Mobile Satellite Systems
1 525-1 530 MHz SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) ***5.208B*** ***5.351A*** Earth exploration-satellite Mobile except aeronautical mobile ***5.349*** ***5.341*** 5.342 5.350 ***5.351*** ***5.352A*** ***5.354***	**1 525-1 530 MHz** SPACE OPERATION (space-to-Earth) FIXED MOBILE-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile Earth exploration-satellite **BHR4**		Mobile Satellite Systems
1 530-1 535 MHz SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) ***5.208B*** ***5.351A*** ***5.353A*** Earth exploration-satellite Fixed Mobile except aeronautical mobile ***5.341*** 5.342 ***5.351*** ***5.354***	**1 530-1 535 MHz** SPACE OPERATION (space-to-Earth) MOBILE-SATELLITE (space-to-Earth) Earth exploration-satellite Fixed Mobile except aeronautical mobile **BHR4**	1 530-1 544 MHz for GMDSS	Mobile Satellite Systems Priority shall be given to accommodating the spectrum requirements for distress, urgency and safety communications of the Global Maritime Distress and Safety System (GMDSS) (5.353A)

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
1 535-1 559 MHz MOBILE-SATELLITE (space-to-Earth) ***5.208B*** ***5.351A*** ***5.341*** ***5.351*** ***5.353A*** ***5.354*** ***5.355*** ***5.356*** 5.357 ***5.357A*** ***5.359*** 5.362A	**1 535-1 540 MHz** MOBILE-SATELLITE (space-to-Earth) **BHR4** **1 540-1 559 MHz** MOBILE-SATELLITE (space-to-Earth) Fixed **BHR4**	1 530-1 544 MHz for GMDSS 1 544-1 545 MHz for GMDSS	Mobile Satellite Systems Priority shall be given to accommodating the spectrum requirements for distress, urgency and safety communications of the Global Maritime Distress and Safety System (GMDSS) (5.353A)
1 559-1 610 MHz AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) ***5.208B*** ***5.328B*** ***5.329A*** ***5.341***	**1 559-1 610 MHz** AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) **BHR4**		Radionavigation Systems

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
1 610-1 610.6 MHz	**1 610-1 610.6 MHz**		Mobile Satellite Systems
MOBILE-SATELLITE (Earth-to-space) *5.351A*	MOBILE-SATELLITE (Earth-to-space)		Radionavigation Systems
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
5.341 *5.355* *5.359* *5.364* *5.366* *5.367* *5.368* 5.369 *5.371* *5.372*	Fixed		
	BHR4		
1 610.6-1 613.8 MHz	**1 610.6-1 613.8 MHz**		Mobile Satellite Systems
MOBILE-SATELLITE (Earth-to-space) *5.351A*	MOBILE-SATELLITE (Earth-to-space)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
5.149 *5.341* *5.355* *5.359* *5.364* *5.366* *5.367* *5.368* 5.369 *5.371* *5.372*	Fixed		
	BHR4		
1 613.8-1 626.5 MHz	**1 613.8-1 626.5 MHz**		Mobile Satellite Systems
MOBILE-SATELLITE (Earth-to-space) *5.351A*	MOBILE-SATELLITE (Earth-to-space)		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
Mobile-satellite (space-to-Earth) *5.208B*	Mobile-satellite (space-to-Earth)		
5.341 *5.355* *5.359* *5.364* *5.365* *5.366* *5.367* *5.368* 5.369 *5.371* *5.372*	Fixed		
	BHR4		
1 626.5-1 660 MHz	**1 626.5-1 645.5 MHz**	1 626.5-1 645.5 MHz for GMDSS	Mobile Satellite Systems
MOBILE-SATELLITE (Earth-to-space) *5.351A*	MOBILE-SATELLITE (Earth-to-space)		Priority shall be given to accommodating the spectrum requirements for distress, urgency and safety communications of the Global Maritime Distress and Safety System (GMDSS) (5.353A)
5.341 *5.351* *5.353A* *5.354* *5.355* *5.357A*	Fixed		
5.359 5.362A *5.374* *5.375* 5.376	**BHR4**		
	1 645.5-1 646.5 MHz		Mobile Satellite Systems
	MOBILE-SATELLITE (Earth-to-space)		
	1 646.5-1 660 MHz		Mobile Satellite Systems
	MOBILE-SATELLITE (Earth-to-space)		
	Fixed		
	BHR4		
1 660-1 660.5 MHz	**1 660-1 660.5 MHz**		Mobile Satellite Systems
MOBILE-SATELLITE (Earth-to-space) *5.351A*	MOBILE-SATELLITE (Earth-to-space)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
5.149 *5.341* *5.351* *5.354* 5.362A *5.376A*	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
1 660.5-1 668 MHz	**1 660.5-1 668 MHz**		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
Fixed	Fixed		
Mobile except aeronautical mobile	Mobile except aeronautical mobile		
5.149 ***5.341*** 5.379 ***5.379A***	**BHR4**		
1 668-1 668.4 MHz	**1 668-1 668.4 MHz**		Mobile Satellite Systems
MOBILE-SATELLITE (Earth-to-space)	MOBILE-SATELLITE		
5.351A ***5.379B*** ***5.379C***	(Earth-to-space)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
Fixed	Fixed		
Mobile except aeronautical mobile	Mobile except aeronautical mobile		
5.149 ***5.341*** 5.379 ***5.379A***	**BHR4**		
1 668.4-1 670 MHz	**1 668.4-1 670 MHz**		Mobile Satellite Systems
METEOROLOGICAL AIDS	METEOROLOGICAL AIDS		
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
MOBILE-SATELLITE (Earth-to-space)	MOBILE-SATELLITE		
5.351A ***5.379B*** ***5.379C***	(Earth-to-space)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
5.149 ***5.341*** ***5.379D*** ***5.379E***	**BHR4**		
1 670-1 675 MHz	**1 670-1 675 MHz**		Mobile Satellite Systems
METEOROLOGICAL AIDS	METEOROLOGICAL AIDS		
FIXED	FIXED		
METEOROLOGICAL-SATELLITE (space-to-Earth)	METEOROLOGICAL-SATELLITE (space-to-Earth)		
MOBILE	MOBILE		
MOBILE-SATELLITE (Earth-to-space) ***5.351A*** ***5.379B***	MOBILE-SATELLITE (Earth-to-space)		
5.341 ***5.379D*** ***5.379E*** ***5.380A***	**BHR4**		
1 675-1 690 MHz	**1 675-1 690 MHz**		
METEOROLOGICAL AIDS	METEOROLOGICAL AIDS		
FIXED	FIXED		
METEOROLOGICAL-SATELLITE (space-to-Earth)	METEOROLOGICAL-SATELLITE (space-to-Earth)		
MOBILE except aeronautical mobile ***5.341***	MOBILE except aeronautical mobile		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
1 690-1 700 MHz	**1 690-1 700 MHz**		
METEOROLOGICAL AIDS	METEOROLOGICAL AIDS		
METEOROLOGICAL-SATELLITE (space-to-Earth)	METEOROLOGICAL-SATELLITE (space-to-Earth)		
Fixed	FIXED		
Mobile except aeronautical mobile	MOBILE except aeronautical mobile		
5.289 ***5.341*** ***5.382***	**BHR4**		
1 700-1 710 MHz	**1 700-1 710 MHz**		
FIXED	FIXED		
METEOROLOGICAL-SATELLITE (space-to-Earth)	METEOROLOGICAL-SATELLITE (space-to-Earth)		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
5.289 ***5.341***	**BHR4**		
1 710-1 930 MHz	**1 710-1 930 MHz**	IMT	1710-1785 paired with 1805-1880 MHz
FIXED	FIXED		1920-1980 MHz paired with 2110-2170 MHz
MOBILE ***5.384A*** ***5.388A*** ***5.388B***	MOBILE		TDD 1900-1920 MHz
5.149 ***5.341*** ***5.385*** 5.386 5.387 ***5.388***	**BHR4**		TDD 1790-1800 MHz
1 930-1 970 MHz	**1 930-1 970 MHz**	IMT	1920-1980 MHz paired with 2110-2170 MHz
FIXED	FIXED		
MOBILE ***5.388A*** ***5.388B***	MOBILE		
5.388	**BHR4**		
1 970-1 980 MHz	**1 970-1 980 MHz**	IMT	1920-1980 MHz paired with 2110-2170 MHz
FIXED	FIXED		
MOBILE ***5.388A*** ***5.388B***	MOBILE		
5.388	**BHR4**		
1 980-2 010 MHz	**1 980-2 010 MHz**	IMT	
FIXED	FIXED		
MOBILE	MOBILE		
MOBILE-SATELLITE (Earth-to-space) ***5.351A***	MOBILE-SATELLITE (Earth-to-space)		
5.388 ***5.389A*** 5.389B 5.389F	**BHR4**		
2 010-2 025 MHz	**2 010-2 025 MHz**	IMT	The use of the bands 2 010-2 025 MHz and 2 160-2 170 MHz by the mobile-satellite service in Region 2 shall not cause harmful interference to or constrain the development of the fixed and mobile services in Regions 1 and 3.
FIXED	FIXED		
MOBILE ***5.388A*** ***5.388B***	MOBILE		
5.388	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
2 025-2 110 MHz	**2 025-2 110 MHz**		
SPACE OPERATION (Earth-to-space) (space-to-space)	SPACE OPERATION (Earth-to-space) (space-to-space)		
EARTH EXPLORATION-SATELLITE (Earth-to-space) (space-to-space)	EARTH EXPLORATION-SATELLITE (Earth-to-space) (space-to-space)		
FIXED	FIXED		
MOBILE ***5.391***	MOBILE		
SPACE RESEARCH (Earth-to-space) (space-to-space)	SPACE RESEARCH (Earth-to-space) (space-to-space)		
5.392	**BHR4**		
2 110-2 120 MHz	**2 110-2 120 MHz**	IMT	1920-1980 MHz paired with 2110-2170 MHz
FIXED	FIXED		
MOBILE ***5.388A*** ***5.388B***	MOBILE		
SPACE RESEARCH (deep space) (Earth-to-space)	**BHR4**		
5.388			
2 120-2 160 MHz	**2 120-2 160 MHz**	IMT	1920-1980 MHz paired with 2110-2170 MHz
FIXED	FIXED		
MOBILE ***5.388A*** ***5.388B***	MOBILE		
5.388	**BHR4**		
2 160-2 170 MHz	**2 160-2 170 MHz**	IMT	1920-1980 MHz paired with 2110-2170 MHz
FIXED	FIXED		
MOBILE ***5.388A*** ***5.388B***	MOBILE		
5.388	**BHR4**		
2 170-2 200 MHz	**2 170-2 200 MHz**	IMT	
FIXED	FIXED		
MOBILE	MOBILE		
MOBILE-SATELLITE (space-to-Earth) ***5.351A***	MOBILE-SATELLITE (space-to-Earth)		
5.388 ***5.389A*** 5.389F	**BHR4**		
2 200-2 290 MHz	**2 200-2 290 MHz**		
SPACE OPERATION (space-to-Earth) (space-to-space)	SPACE OPERATION (space-to-Earth) (space-to-space)		
EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space)	EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-space)		
FIXED	FIXED		
MOBILE ***5.391***	MOBILE		
SPACE RESEARCH (space-to-Earth) (space-to-space)	SPACE RESEARCH (space-to-Earth) (space-to-space)		
5.392	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
2 290-2 300 MHz	**2 290-2 300 MHz**		
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
SPACE RESEARCH (deep space) (space-to-Earth)	SPACE RESEARCH (deep space) (space-to-Earth)		
	BHR4		
2 300-2 450 MHz	**2 300-2 450 MHz**		Maximum power for Amateur bands 2300.000 MHz – 2310.000 MHz and 2400.000 MHz – 2450.000 MHz are 100W & 25W (e.i.r.p) respectively.
FIXED	FIXED		
MOBILE ***5.384A***	MOBILE		WiFi band 2 400-2 483.5 MHz
Amateur	Amateur **BHR2**		Amateur in the bands 2300-2310 MHz & 2 400-2 450 MHz only.
Radiolocation	**BHR4**		
5.150 ***5.282*** 5.395			
2 450-2 483.5 MHz	**2 450-2 483.5 MHz**		WiFi band 2 400-2 483.5 MHz
FIXED	FIXED		
MOBILE	MOBILE		
Radiolocation	Radiolocation		
5.150 5.397	**BHR4**		
2 483.5-2 500 MHz	**2 483.5-2 500 MHz**		
FIXED	FIXED		
MOBILE	MOBILE		
MOBILE-SATELLITE (space-to-Earth) ***5.351A***	MOBILE-SATELLITE (space-to-Earth)		
RADIODETERMINATION-SATELLITE (space-to-Earth) ***5.398***	RADIODETERMINATION-SATELLITE (space-to-Earth)		
Radiolocation 5.398A	Radiolocation		
5.150 5.399 5.401 ***5.402***	**BHR4**		
2 500-2 520 MHz	**2 500-2 520 MHz**	IMT	2500-2570 paired with 2620-2690 MHz
FIXED ***5.410***	MOBILE except aeronautical mobile		
MOBILE except aeronautical mobile ***5.384A***	**BHR4**		
5.405 5.412			
2 520-2 655 MHz	**2 520-2 655 MHz**	IMT	Government TDD 2570-2620 MHz
FIXED ***5.410***	MOBILE except aeronautical mobile		2500-2570 paired with 2620-2690 MHz
MOBILE except aeronautical mobile ***5.384A***	**BHR4**		
BROADCASTING-SATELLITE ***5.413*** ***5.416***			
5.339 5.412 ***5.418B*** ***5.418C***			

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
2 655-2 670 MHz FIXED ***5.410*** MOBILE except aeronautical mobile ***5.384A*** BROADCASTING-SATELLITE ***5.208B*** ***5.413*** ***5.416*** Earth exploration-satellite (passive) Radio astronomy Space research (passive) ***5.149*** 5.412	**2 655-2 670 MHz** MOBILE except aeronautical mobile **BHR4**	IMT	2500-2570 paired with 2620-2690 MHz
2 670-2 690 MHz FIXED ***5.410*** MOBILE except aeronautical mobile ***5.384A*** Earth exploration-satellite (passive) Radio astronomy Space research (passive) ***5.149*** 5.412	**2 670-2 690 MHz** MOBILE except aeronautical mobile **BHR4**	IMT	2500-2570 paired with 2620-2690 MHz
2 690-2 700 MHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) ***5.340*** ***5.422***	**2 690-2 700 MHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) FIXED MOBILE except aeronautical mobile **BHR4**		
2 700-2 900 MHz AERONAUTICAL RADIONAVIGATION ***5.337*** Radiolocation ***5.423*** 5.424	**2 700-2 900 MHz** AERONAUTICAL RADIONAVIGATION Radiolocation **BHR4**		Radars & Navigation
2 900-3 100 MHz RADIOLOCATION ***5.424A*** RADIONAVIGATION 5.426 ***5.425*** ***5.427***	**2 900-3 100 MHz** RADIOLOCATION RADIONAVIGATION **BHR4**		Radars & Navigation

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
3 100-3 300 MHz	**3 100-3 300 MHz**		Utilized to be used in Bahrain for Fixed and Mobile on secondary basis
RADIOLOCATION	RADIOLOCATION		
Earth exploration-satellite (active)	Fixed **BHR1**		
Space research (active)	Mobile **BHR1**		
5.149 5.428	Earth exploration-satellite (active)		
	Space research (active)		
	BHR4		
3 300-3 400 MHz	**3 300-3 400 MHz**		
RADIOLOCATION	FIXED		
5.149 ***5.429*** ***5.429A*** ***5.429B*** 5.430	MOBILE		
	BHR4		
3 400-3 600 MHz	**3 400-3 600 MHz**	IMT	TDD 3410 – 3500 MHz & 3500 – 3590 MHz
FIXED	FIXED		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
MOBILE except aeronautical mobile ***5.430A***	MOBILE except aeronautical mobile		
Radiolocation	**BHR4**		
5.431			
3 600-4 200 MHz	**3 600-3 700 MHz**		VSAT Downlink
FIXED	FIXED		
FIXED-SATELLITE (space-to-Earth)	Mobile		
Mobile	**BHR4**		
	3 700-4 200 MHz		
	FIXED		
	FIXED-SATELLITE (space-to-Earth)		
	Mobile		
	BHR4		
4 200-4 400 MHz	**4 200-4 400 MHz**		
AERONAUTICAL MOBILE (R) ***5.436***	AERONAUTICAL MOBILE (R)		
AERONAUTICAL RADIONAVIGATION ***5.438***	AERONAUTICAL RADIONAVIGATION		
5.437 5.439 ***5.440***	**BHR4**		
4 400-4 500 MHz	**4 400-4 500 MHz**		
FIXED	FIXED		
MOBILE 5.440A	MOBILE		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
4 500-4 800 MHz	**4 500-4 800 MHz**		
FIXED	FIXED		
FIXED-SATELLITE (space-to-Earth) ***5.441***	FIXED-SATELLITE (space-to-Earth)		
MOBILE 5.440A	MOBILE		
	BHR 4		
4 800-4 990 MHz	**4 800-4 990 MHz**		
FIXED	FIXED		
MOBILE 5.440A 5.441A 5.441B 5.442	MOBILE		
Radio astronomy	**BHR 4**		
5.149 ***5.339*** 5.443			
4 990-5 000 MHz	**4 990-5 000 MHz**	FIXED	
FIXED	FIXED	MOBILE except aeronautical mobile	
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
RADIO ASTRONOMY	Space research (passive)		
Space research (passive)	**BHR 4**		
5.149			
5 000-5 010 MHz	**5 000-5 010 MHz**		Satellite navigation
AERONAUTICAL MOBILE-SATELLITE (R) ***5.443AA***	AERONAUTICAL MOBILE-SATELLITE (R)		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
RADIONAVIGATION-SATELLITE (Earth-to-space)	RADIONAVIGATION-SATELLITE (Earth-to-space)		
	BHR 4		
5 010-5 030 MHz	**5 010-5 030 MHz**		Satellite navigation
AERONAUTICAL MOBILE-SATELLITE (R) ***5.443AA***	AERONAUTICAL MOBILE-SATELLITE (R)		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space) ***5.328B*** ***5.443B***	RADIONAVIGATION-SATELLITE (space-to-Earth) (space-to-space)		
	BHR 4		
5 030-5 091 MHz	**5 030-5 091 MHz**		
AERONAUTICAL MOBILE (R) ***5.443C***	AERONAUTICAL MOBILE (R)		
AERONAUTICAL MOBILE-SATELLITE (R) ***5.443D***	AERONAUTICAL MOBILE-SATELLITE (R)		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
5.444	**BHR 4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
5 091-5 150 MHz	**5 091-5 150 MHz**		
FIXED-SATELLITE (Earth-to-space) ***5.444A***	FIXED-SATELLITE (Earth-to-space)		
AERONAUTICAL MOBILE ***5.444B***	AERONAUTICAL MOBILE		
AERONAUTICAL MOBILE-SATELLITE (R) ***5.443AA***	AERONAUTICAL MOBILE-SATELLITE (R)		
AERONAUTICAL RADIONAVIGATION ***5.444***	AERONAUTICAL RADIONAVIGATION		
	BHR 4		
5 150-5 250 MHz	**5 150-5 250 MHz**		Wifi band 5150 – 5350 MHz
FIXED-SATELLITE (Earth-to-space) ***5.447A***	FIXED-SATELLITE (Earth-to-space)		
MOBILE except aeronautical mobile ***5.446A 5.446B***	MOBILE except aeronautical mobile		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
5.446 ***5.446C*** 5.447 ***5.447B 5.447C***			
	BHR4		
5 250-5 255 MHz	**5 250-5 255 MHz**		Wifi band 5150 – 5350 MHz
EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)		Shipborne and VTS radar
MOBILE except aeronautical mobile ***5.446A 5.447F***	MOBILE except aeronautical mobile		Weather radar
RADIOLOCATION	RADIOLOCATION		
SPACE RESEARCH ***5.447D***	SPACE RESEARCH		
5.447E 5.448 ***5.448A***	**BHR4**		
5 255-5 350 MHz	**5 255-5 350 MHz**		Wifi band 5150 – 5350 MHz
EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)		Shipborne and VTS radar
MOBILE except aeronautical mobile ***5.446A 5.447F***	MOBILE except aeronautical mobile		Weather radar
RADIOLOCATION	RADIOLOCATION		
SPACE RESEARCH (active)	SPACE RESEARCH (active)		
5.447E 5.448 ***5.448A***	**BHR4**		
5 350-5 460 MHz	**5 350-5 460 MHz**		Shipborne and VTS radar
EARTH EXPLORATION-SATELLITE (active) ***5.448B***	EARTH EXPLORATION-SATELLITE (active)		Weather radar
RADIOLOCATION ***5.448D***	RADIOLOCATION		
AERONAUTICAL RADIONAVIGATION ***5.449***	AERONAUTICAL RADIONAVIGATION		
SPACE RESEARCH (active) ***5.448C***	SPACE RESEARCH (active)		
	BHR 4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
5 460-5 470 MHz	**5 460-5 470 MHz**		Shipborne and VTS radar
EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)		Weather radar
RADIOLOCATION ***5.448D***	RADIOLOCATION		
RADIONAVIGATION ***5.449***	RADIONAVIGATION		
SPACE RESEARCH (active)	SPACE RESEARCH (active)		
5.448B	**BHR 4**		
5 470-5 570 MHz	**5 470-5 570 MHz**		Private RLANS 5470 – 5725 MHz
EARTH EXPLORATION-SATELLITE (active)	MOBILE except aeronautical mobile		
MOBILE except aeronautical mobile ***5.446A*** ***5.450A***	**BHR 4**		
RADIOLOCATION ***5.450B***			
MARITIME RADIONAVIGATION			
SPACE RESEARCH (active)			
5.448B 5.450 5.451			
5 570-5 650 MHz	**5 570-5 650 MHz**		Private RLANS 5470 – 5725 MHz
MOBILE except aeronautical mobile ***5.446A*** ***5.450A***	MOBILE except aeronautical mobile		Shipborne and VTS radar
RADIOLOCATION ***5.450B***	RADIOLOCATION		Weather radar
MARITIME RADIONAVIGATION	**BHR4**		
5.450 5.451 ***5.452***			
5 650-5 725 MHz	**5 650-5 725 MHz**		Private RLANS 5470 – 5725 MHz
MOBILE except aeronautical mobile ***5.446A*** ***5.450A***	FIXED		Maximum power for Amateur is 100W (e.i.r.p).
RADIOLOCATION	MOBILE		
Amateur	Amateur **BHR2**		
Space research (deep space)	**BHR4**		
5.282 5.451 ***5.453*** 5.454 5.455			
5 725-5 830 MHz	**5 725-5 830 MHz**		Wifi band 5725 – 5875 MHz
FIXED-SATELLITE (Earth-to-space)	FIXED-SATELLITE (Earth-to-space)		BFWA
RADIOLOCATION	FIXED		Maximum power for Amateur is 100W (e.i.r.p).
Amateur	MOBILE		
5.150 5.451 ***5.453*** 5.455	Amateur **BHR2**		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
5 830-5 850 MHz	**5 830-5 850 MHz**		Wifi band 5725 – 5875 MHz
FIXED-SATELLITE (Earth-to-space)	FIXED-SATELLITE (Earth-to-space)		BFWA
RADIOLOCATION	RADIOLOCATION		Maximum power for Amateur is 100W (e.i.r.p).
Amateur	FIXED		
Amateur-satellite (space-to-Earth)	MOBILE		
5.150 5.451 ***5.453*** 5.455	Amateur **BHR2**		
	Amateur-satellite (space-to-Earth)		
	BHR4		
5 850-5 925 MHz	**5 850-5 925 MHz**		Wifi band 5725 – 5875 MHz
FIXED	FIXED		BFWA
FIXED-SATELLITE (Earth-to-space)	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
5.150	**BHR4**		
5 925-6 700 MHz	**5 925-6 700 MHz**		In accordance with Resolution 902 (WRC-03)
FIXED 5.457	FIXED **BHR3**		VSAT Uplink
FIXED-SATELLITE (Earth-to-space) ***5.457A*** ***5.457B***	FIXED-SATELLITE (Earth-to-space)		
MOBILE 5.457C	MOBILE		
5.149 ***5.440*** ***5.458***	**BHR4**		
6 700-7 075 MHz	**6 700-7 075 MHz**		
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space) (space-to-Earth) ***5.441***	FIXED-SATELLITE (Earth-to-space) (space-to-Earth)		
MOBILE	MOBILE		
5.458 ***5.458A*** ***5.458B***	**BHR4**		
7 075-7 145 MHz	**7 075-7 145 MHz**		
FIXED	FIXED **BHR3**		
MOBILE	MOBILE		
5.458 5.459	**BHR4**		
7 145-7 190 MHz	**7 145-7 190 MHz**		
FIXED	FIXED **BHR3**		
MOBILE	MOBILE		
SPACE RESEARCH (deep space) (Earth-to-space)	SPACE RESEARCH (deep space) (Earth-to-space)		
5.458 5.459	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
7 190 -7 235 MHz	**7 190 -7 235 MHz**		
EARTH EXPLORATION-SATELLITE (Earth-to-space) ***5.460A*** ***5.460B***	EARTH EXPLORATION-SATELLITE (Earth-to-space)		
FIXED	FIXED **BHR3**		
MOBILE	MOBILE		
SPACE RESEARCH (Earth-to-space) ***5.460***	SPACE RESEARCH (Earth-to-space)		
5.458 5.459	**BHR4**		
7 235-7 250 MHz	**7 235-7 250 MHz**		
EARTH EXPLORATION-SATELLITE (Earth-to-space) ***5.460A***	EARTH EXPLORATION-SATELLITE (Earth-to-space)		
FIXED	FIXED **BHR3**		
MOBILE	MOBILE		
5.458	**BHR4**		
7 250-7 300 MHz	**7 250-7 300 MHz**		
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
MOBILE	MOBILE		
5.461	**BHR4**		
7 300-7 375 MHz	**7 300-7 375 MHz**		VSAT Downlink
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
5.461	**BHR4**		
7 375-7 450 MHz	**7 375-7 450 MHz**		VSAT Downlink
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
MARITIME MOBILE-SATELLITE (space-to-Earth) ***5.461AA*** ***5.461AB***	MARITIME MOBILE-SATELLITE (space-to-Earth)		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
7 450-7 550 MHz	**7 450-7 550 MHz**		VSAT Downlink
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
METEOROLOGICAL-SATELLITE (space-to-Earth)	METEOROLOGICAL-SATELLITE (space-to-Earth)		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
MARITIME MOBILE-SATELLITE (space-to-Earth) ***5.461AA*** ***5.461AB***	MARITIME MOBILE-SATELLITE (space-to-Earth)		
5.461A	**BHR4**		
7 550-7 750 MHz	**7 550-7 750 MHz**		VSAT Downlink
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
MARITIME MOBILE-SATELLITE (space-to-Earth) ***5.461AA*** ***5.461AB***	MARITIME MOBILE-SATELLITE (space-to-Earth)		
	BHR4		
7 750-7 900 MHz	**7 750-7 900 MHz**		
FIXED	FIXED **BHR3**		
METEOROLOGICAL-SATELLITE (space-to-Earth) ***5.461B***	METEOROLOGICAL-SATELLITE (space-to-Earth)		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
	BHR4		
7 900-8 025 MHz	**7 900-8 025 MHz**		VSAT Uplink
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space)	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
5.461	**BHR4**		
8 025-8 175 MHz	**8 025-8 175 MHz**		VSAT Uplink
EARTH EXPLORATION-SATELLITE (space-to-Earth)	EARTH EXPLORATION-SATELLITE (space-to-Earth)		
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space)	FIXED-SATELLITE (Earth-to-space)		
MOBILE ***5.463***	MOBILE		
5.462A	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
8 175-8 215 MHz	**8 175-8 215 MHz**		VSAT Uplink
EARTH EXPLORATION-SATELLITE (space-to-Earth)	EARTH EXPLORATION-SATELLITE (space-to-Earth)		
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space)	FIXED-SATELLITE (Earth-to-space)		
METEOROLOGICAL-SATELLITE (Earth-to-space)	METEOROLOGICAL-SATELLITE (Earth-to-space)		
MOBILE ***5.463***	MOBILE		
5.462A	**BHR4**		
8 215-8 400 MHz	**8 215-8 400 MHz**		VSAT Uplink
EARTH EXPLORATION-SATELLITE (space-to-Earth)	EARTH EXPLORATION-SATELLITE (space-to-Earth)		
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space)	FIXED-SATELLITE (Earth-to-space)		
MOBILE ***5.463***	MOBILE		
5.462A	**BHR4**		
8 400-8 500 MHz	**8 400-8 500 MHz**		
FIXED	FIXED **BHR 3**		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
SPACE RESEARCH (space-to-Earth) ***5.465*** 5.466	SPACE RESEARCH (space-to-Earth)		
	BHR4		
8 500-8 550 MHz	**8 500-8 550 MHz**		
RADIOLOCATION	RADIOLOCATION		
5.468 5.469	FIXED		
	MOBILE		
	BHR4		
8 550-8 650 MHz	**8 550-8 650 MHz**		
EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)		
RADIOLOCATION	RADIOLOCATION		
SPACE RESEARCH (active)	SPACE RESEARCH (active)		
5.468 5.469 ***5.469A***	FIXED		
	MOBILE		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
8 650-8 750 MHz	**8 650-8 750 MHz**		
RADIOLOCATION	RADIOLOCATION		
5.468 5.469	FIXED		
	MOBILE		
	BHR4		
8 750-8 850 MHz	**8 750-8 825 MHz**		Aeronautical radionavigation service is limited to airborne doppler navigation aids on a centre frequency of 8 800 MHz
RADIOLOCATION	RADIOLOCATION		
AERONAUTICAL RADIONAVIGATION *5.470*	AERONAUTICAL RADIONAVIGATION		
5.471	**BHR4**		
	8 825-8 850 MHz		Maritime Radionavigation is limited to for Shore based radars 8 825-8 850 MHz
	MARITIME RADIONAVIGATION		
	BHR4		
8 850-9 000 MHz	**8 850-9 000 MHz**		
RADIOLOCATION	RADIOLOCATION		
MARITIME RADIONAVIGATION *5.472*	MARITIME RADIONAVIGATION		
5.473	**BHR4**		
9 000-9 200 MHz	**9 000-9 200 MHz**		Maritime Radionavigation is limited to for Shore based radars 9 000-9 200 MHz
RADIOLOCATION	RADIOLOCATION		Aeronautical radionavigation
AERONAUTICAL RADIONAVIGATION *5.337*	AERONAUTICAL RADIONAVIGATION		
5.471 *5.473A*	MARITIME RADIONAVIGATION		
	BHR4		
9 200-9 300 MHz	**9 200-9 300 MHz**		Earth exploration-satellite service should be in accordance with the conditions mentioned in 5.474A
EARTH EXPLORATION-SATELLITE (active) *5.474A* *5.474B* *5.474C*	EARTH EXPLORATION-SATELLITE (active)		Shipborne radar
RADIOLOCATION	RADIOLOCATION		9 200-9 500 MHz search and rescue transponders (SART) may be used
MARITIME RADIONAVIGATION *5.472*	MARITIME RADIONAVIGATION		
5.473 *5.474* *5.474D*	**BHR4**		
9 300-9 500 MHz	**9 300-9 500 MHz**		Shipborne radar
EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)		Radionavigation
RADIOLOCATION	RADIOLOCATION		9 200-9 500 MHz search and rescue transponders (SART) may be used
RADIONAVIGATION	RADIONAVIGATION		
SPACE RESEARCH (active)	SPACE RESEARCH (active)		
5.427 *5.474* *5.475* *5.475A* *5.475B* *5.476A*	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
9 500-9 800 MHz	**9 500-9 800 MHz**		
EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)		
RADIOLOCATION	RADIOLOCATION		
RADIONAVIGATION	RADIONAVIGATION		
SPACE RESEARCH (active)	SPACE RESEARCH (active)		
5.476A	**BHR4**		
9 800-9 900 MHz	**9 800-9 900 MHz**		
RADIOLOCATION	RADIOLOCATION		
Earth exploration-satellite (active)	FIXED		
Fixed	Earth exploration-satellite (active)		
Space research (active)	Space research (active)		
5.477 5.478 ***5.478A*** ***5.478B***	**BHR4**		
9 900-10 000 MHz	**9 900-10 000 MHz**		Earth exploration-satellite service should be in accordance with the conditions mentioned in 5.474A
EARTH EXPLORATION-SATELLITE (active) ***5.474A*** ***5.474B*** ***5.474C***	EARTH EXPLORATION-SATELLITE (active)		
RADIOLOCATION	RADIOLOCATION		
Fixed	FIXED		
5.477 5.478 ***5.479*** ***5.474D***	**BHR4**		
10-10.4 GHz	**10-10.4 GHz**	FIXED	Earth exploration-satellite service should be in accordance with the conditions mentioned in 5.474A
EARTH EXPLORATION-SATELLITE (active) ***5.474A*** ***5.474B*** ***5.474C***	EARTH EXPLORATION-SATELLITE (active)		
FIXED	FIXED		Maximum power for Amateur is 100W (e.i.r.p).
MOBILE	MOBILE		
RADIOLOCATION	RADIOLOCATION		
Amateur	Amateur **BHR2**		
5.479 ***5.474D***	**BHR4**		
10.4-10.45 GHz	**10.4-10.45 GHz**	FIXED	Maximum power for Amateur is 100W (e.i.r.p).
FIXED	FIXED		
MOBILE	MOBILE		
RADIOLOCATION	RADIOLOCATION		
Amateur	Amateur **BHR2**		
	BHR4		
10.45-10.5 GHz	**10.45-10.5 GHz**		Maximum power for Amateur is 100W (e.i.r.p).
RADIOLOCATION	RADIOLOCATION		
Amateur	Amateur **BHR2**		
Amateur-satellite	Amateur-satellite		
5.481	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
10.5-10.55 GHz	**10.5-10.55 GHz**	FIXED	
FIXED	FIXED		
MOBILE	MOBILE		
Radiolocation	**BHR4**		
10.55-10.6 GHz	**10.55-10.6 GHz**	FIXED	
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
Radiolocation	**BHR4**		
10.6-10.68 GHz	**10.6-10.68 GHz**	FIXED	
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
RADIO ASTRONOMY	**BHR4**		
SPACE RESEARCH (passive)			
Radiolocation			
5.149 ***5.482*** ***5.482A***			
10.68-10.7 GHz	**10.68-10.7 GHz**	Passive Band	
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340 ***5.483***	FIXED		
	MOBILE except aeronautical mobile		
	BHR4		
10.7-10.95 GHz	**10.7-10.95 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth) ***5.441*** (Earth-to-space) ***5.484***	FIXED-SATELLITE (space-to-Earth) (Earth-to-space)		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
	BHR4		
10.95-11.2 GHz	**10.95-11.2 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth) ***5.484A*** ***5.484B*** (Earth-to-space) ***5.484***	FIXED-SATELLITE (space-to-Earth) (Earth-to-space)		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
11.2-11.45 GHz	**11.2-11.45 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth) ***5.441*** (Earth-to-space) ***5.484***	FIXED-SATELLITE (space-to-Earth) (Earth-to-space)		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
	BHR4		
11.45-11.7 GHz	**11.45-11.7 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth) ***5.484A*** ***5.484B*** (Earth-to-space) ***5.484***	FIXED-SATELLITE (space-to-Earth) (Earth-to-space)		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
	BHR4		
11.7-12.5 GHz	**11.7-12.5 GHz**		For Broadcasting-Satellite refer to the Appendix 30 and Radio Regulations Res. 73
FIXED	FIXED		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
BROADCASTING	BROADCASTING		
BROADCASTING-SATELLITE ***5.492***	BROADCASTING-SATELLITE		
5.487 ***5.487A***			
	BHR4		
12.5-12.75 GHz	**12.5-12.75 GHz**		VSAT Downlink/Uplink
FIXED-SATELLITE (space-to-Earth) ***5.484A*** ***5.484B*** (Earth-to-space)	FIXED-SATELLITE (space-to-Earth) (Earth-to-space)		
5.494 5.495 5.496	FIXED		
	MOBILE except aeronautical mobile		
12.75-13.25 GHz	**12.75-13.25 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space) ***5.441***	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
Space research (deep space) (space-to-Earth)	Space research (deep space) (space-to-Earth)		
13.25-13.4 GHz	**13.25-13.4 GHz**		
EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)		
AERONAUTICAL RADIONAVIGATION ***5.497***	AERONAUTICAL RADIONAVIGATION		
SPACE RESEARCH (active)	SPACE RESEARCH (active)		
5.498A 5.499			

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
13.4-13.65 GHz EARTH EXPLORATION-SATELLITE (active) FIXED-SATELLITE (space-t-earth) ***5.499A*** ***5.499B*** RADIOLOCATION SPACE RESEARCH ***5.499C*** ***5.499D*** Standard frequency and time signal-satellite (Earth-to-space) 5.499 ***5.499E*** ***5.500*** 5.501 ***5.501B***	**13.4-13.65 GHz** EARTH EXPLORATION-SATELLITE (active) FIXED-SATELLITE (space-t-earth) RADIOLOCATION SPACE RESEARCH FIXED MOBILE Standard frequency and time signal-satellite (Earth-to-space) **BHR4**		Refer to the ITU Radio Regulation Article 26
13.65-13.75 GHz EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH ***5.501A*** Standard frequency and time signal-satellite (Earth-to-space) 5.499 ***5.500*** 5.501 5.501B	**13.65-13.75 GHz** EARTH EXPLORATION-SATELLITE (active) RADIOLOCATION SPACE RESEARCH FIXED MOBILE Standard frequency and time signal-satellite (Earth-to-space) **BHR4**		Refer to the ITU Radio Regulation Article 26
13.75-14 GHz FIXED-SATELLITE (Earth-to-space) ***5.484A*** RADIOLOCATION Earth exploration-satellite Standard frequency and time signal-satellite (Earth-to-space) Space research 5.499 ***5.500*** 5.501 ***5.502*** ***5.503***	**13.75-14 GHz** FIXED-SATELLITE (Earth-to-space) FIXED MOBILE Earth exploration-satellite Standard frequency and time signal-satellite (Earth-to-space) Space research **BHR4**	FIXED-SATELLITE (Earth-to-space)	Refer to the ITU Radio Regulation Article 26 VSAT Uplink
14-14.25 GHz FIXED-SATELLITE (Earth-to-space) ***5.457A*** ***5.457B*** ***5.484A*** ***5.506*** ***5.506B*** ***5.484B*** RADIONAVIGATION ***5.504*** Mobile-satellite (Earth-to-space) ***5.504B*** ***5.504C*** ***5.506A*** Space research ***5.504A*** ***5.505***	**14-14.25 GHz** FIXED-SATELLITE (Earth-to-space) RADIONAVIGATION FIXED Mobile-satellite (Earth-to-space) Space research	FIXED-SATELLITE (Earth-to-space)	In accordance with Resolution 902 (WRC-03) VSAT Uplink

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
14.25-14.3 GHz FIXED-SATELLITE (Earth-to-space) ***5.457A*** ***5.457B*** ***5.484A*** ***5.506*** ***5.506B*** ***5.484B*** RADIONAVIGATION ***5.504*** Mobile-satellite (Earth-to-space) ***5.504B*** ***5.506A*** ***5.508A*** Space research ***5.504A*** ***5.505*** 5.508	**14.25-14.3 GHz** FIXED-SATELLITE (Earth-to-space) FIXED Mobile-satellite (Earth-to-space) Space research	FIXED-SATELLITE (Earth-to-space)	In accordance with Resolution 902 (WRC-03) VSAT Uplink
14.3-14.4 GHz FIXED FIXED-SATELLITE (Earth-to-space) ***5.457A*** ***5.457B*** ***5.484A*** ***5.506*** ***5.506B*** ***5.484B*** MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) ***5.504B*** ***5.506A*** ***5.509A*** Radionavigation-satellite ***5.504A***	**14.3-14.4 GHz** FIXED FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) Radionavigation-satellite	FIXED-SATELLITE (Earth-to-space)	In accordance with Resolution 902 (WRC-03) VSAT Uplink
14.4-14.47 GHz FIXED FIXED-SATELLITE (Earth-to-space) ***5.457A*** ***5.457B*** ***5.484A*** ***5.484B*** ***5.506*** ***5.506B*** MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) ***5.504B*** ***5.506A*** ***5.509A*** Space research (space-to-Earth) ***5.504A***	**14.4-14.47 GHz** FIXED **BHR3** FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) Space research (space-to-Earth)	FIXED	In accordance with Resolution 902 (WRC-03)
14.47-14.5 GHz FIXED FIXED-SATELLITE (Earth-to-space) ***5.457A*** ***5.457B*** ***5.484A*** ***5.506*** ***5.506B*** MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space) ***5.504B*** ***5.506A*** ***5.509A*** Radio astronomy ***5.149*** ***5.504A***	**14.47-14.5 GHz** FIXED **BHR3** FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile Mobile-satellite (Earth-to-space)	FIXED	In accordance with Resolution 902 (WRC-03)

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
14.5-14.75 GHz	**14.5-14.75 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space) ***5.509B*** ***5.509C*** ***5.509D*** ***5.509E*** ***5.509F*** ***5.510***	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
Space research ***5.509G***	Space research		
14.75-14.8 GHz	**14.75-14.8 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space) ***5.510***	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
Space research ***5.509G***	Space research		
14.8-15.35 GHz	**14.8-15.35 GHz**	FIXED	
FIXED	FIXED **BHR3**		
MOBILE	MOBILE		
Space research	Space research		
5.339			
15.35-15.4 GHz	**15.35-15.4 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340 ***5.511***	Fixed		
	Mobile		
15.4-15.43 GHz	**15.4-15.43 GHz**		
RADIOLOCATION ***5.511E*** ***5.511F***	RADIOLOCATION		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
15.43-15.63 GHz	**15.43-15.63 GHz**		
FIXED-SATELLITE (Earth-to-space) ***5.511A***	FIXED-SATELLITE (Earth-to-space)		
RADIOLOCATION ***5.511E*** ***5.511F***	RADIOLOCATION		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
5.511C			
15.63-15.7 GHz	**15.63-15.7 GHz**		
RADIOLOCATION ***5.511E*** ***5.511F***	RADIOLOCATION		
AERONAUTICAL RADIONAVIGATION	AERONAUTICAL RADIONAVIGATION		
15.7-16.6 GHz	**15.7-16.6 GHz**		
RADIOLOCATION	RADIOLOCATION		
5.512 5.513	FIXED		
	MOBILE		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
16.6-17.1 GHz	**16.6-17.1 GHz**		
RADIOLOCATION	RADIOLOCATION		
Space research (deep space) (Earth-to-space)	FIXED		
5.512 5.513	MOBILE		
	Space research (deep space) (Earth-to-space)		
17.1-17.2 GHz	**17.1-17.2 GHz**		
RADIOLOCATION	RADIOLOCATION		
5.512 5.513	FIXED		
	MOBILE		
	BHR4		
17.2-17.3 GHz	**17.2-17.3 GHz**		
EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)		
RADIOLOCATION	RADIOLOCATION		
SPACE RESEARCH (active)	SPACE RESEARCH (active)		
5.512 5.513 ***5.513A***	**BHR4**		
17.3-17.7 GHz	**17.3-17.7 GHz**		
FIXED-SATELLITE (Earth-to-space) ***5.516*** (space-to-Earth) ***5.516A*** ***5.516B***	FIXED-SATELLITE (Earth-to-space) (space-to-Earth)		
Radiolocation	Radiolocation		
5.514	Fixed		
	Mobile		
17.7-18.1 GHz	**17.7-18.1 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth) ***5.484A*** (Earth-to-space) ***5.516***	FIXED-SATELLITE (space-to-Earth) (Earth-to-space)		
MOBILE	MOBILE		
18.1-18.4 GHz	**18.1-18.4 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth) ***5.484A*** ***5.516B*** (Earth-to-space) ***5.520***	FIXED-SATELLITE (space-to-Earth) (Earth-to-space)		
MOBILE	MOBILE		
5.519 ***5.521***			
18.4-18.6 GHz	**18.4-18.6 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth) ***5.484A*** ***5.516B***	FIXED-SATELLITE (space-to-Earth)		
MOBILE	MOBILE		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
18.6-18.8 GHz	**18.6-18.8 GHz**	FIXED	
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth) ***5.522B***	FIXED-SATELLITE (space-to-Earth)		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
Space research (passive)	Space research (passive)		
5.522A ***5.522C***			
18.8-19.3 GHz	**18.8-19.3 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth) ***5.516.B*** ***5.523A***	FIXED-SATELLITE (space-to-Earth)		
MOBILE	MOBILE		
19.3-19.7 GHz	**19.3-19.7 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth) (Earth-to-space) ***5.523B*** ***5.523C*** ***5.523D*** ***5.523E***	FIXED-SATELLITE (space-to-Earth) (Earth-to-space)		
MOBILE	MOBILE		
19.7-20.1 GHz	**19.7-20.1 GHz**		VSAT downlink
FIXED-SATELLITE (space-to-Earth) ***5.484A*** ***5.484B*** ***5.516B*** ***5.527A***	FIXED-SATELLITE (space-to-Earth)		
Mobile-satellite (space-to-Earth)	FIXED		
5.524	MOBILE		
	Mobile-satellite (space-to-Earth)		
20.1-20.2 GHz	**20.1-20.2 GHz**		VSAT downlink
FIXED-SATELLITE (space-to-Earth) ***5.484A*** ***5.484B*** ***5.516B*** ***5.527A***	FIXED-SATELLITE (space-to-Earth)		
MOBILE-SATELLITE (space-to-Earth)	MOBILE-SATELLITE (space-to-Earth)		
5.524 ***5.525*** ***5.526*** ***5.527*** ***5.528***	FIXED		
	MOBILE		
20.2-21.2 GHz	**20.2-21.2 GHz**		Refer to the ITU Radio Regulation Article 26
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		VSAT Downlink
MOBILE-SATELLITE (space-to-Earth)	MOBILE-SATELLITE (space-to-Earth)		
Standard frequency and time signal-satellite (space-to-Earth)	FIXED		
5.524	MOBILE		
	Standard frequency and time signal-satellite (space-to-Earth)		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
21.2-21.4 GHz	**21.2-21.4 GHz**	FIXED	
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
FIXED	FIXED **BHR3**		
MOBILE	MOBILE		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
21.4-22 GHz	**21.4-22 GHz**	FIXED	For Broadcasting-Satellite refer to the Radio Regulations Res. 552, 553, 554 and 555
FIXED	FIXED **BHR3**		
MOBILE	MOBILE		
BROADCASTING-SATELLITE ***5.208B*** ***5.530A*** ***5.530B*** ***5.530D***	BROADCASTING-SATELLITE		
22-22.21 GHz	**22-22.21 GHz**	FIXED	
FIXED	FIXED **BHR3**		
MOBILE except aeronautical mobile ***5.149***	MOBILE except aeronautical mobile		
22.21-22.5 GHz	**22.21-22.5 GHz**	FIXED	
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
FIXED	FIXED **BHR3**		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.149 ***5.532***			
22.5-22.55 GHz	**22.5-22.55 GHz**	FIXED	
FIXED	FIXED **BHR3**		
MOBILE	MOBILE		
22.55-23.15 GHz	**22.55-23.15 GHz**	FIXED	
FIXED	FIXED **BHR3**		
INTER-SATELLITE ***5.338A***	INTER-SATELLITE		
MOBILE	MOBILE		
SPACE RESEARCH (Earth-to-space) ***5.532A*** ***5.149***	SPACE RESEARCH (Earth-to-space)		
23.15-23.55 GHz	**23.15-23.55 GHz**	FIXED	
FIXED	FIXED **BHR3**		
INTER-SATELLITE ***5.338A***	INTER-SATELLITE		
MOBILE	MOBILE		
23.55-23.6 GHz	**23.55-23.6 GHz**	FIXED	
FIXED	FIXED **BHR3**		
MOBILE	MOBILE		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
23.6-24 GHz	**23.6-24 GHz**		Passive Band
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340			
24-24.05 GHz	**24-24.05 GHz**		Maximum power for Amateur is 50W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
AMATEUR-SATELLITE	AMATEUR-SATELLITE		
5.150	**BHR4**		
24.05-24.25 GHz	**24.05-24.25 GHz**		Maximum power for Amateur is 50W (e.i.r.p).
RADIOLOCATION	RADIOLOCATION		
Amateur	Amateur **BHR2**		
Earth exploration-satellite (active)	Earth exploration-satellite (active)		
5.150	**BHR4**		
24.25-24.45 GHz	**24.25-24.45 GHz**		
FIXED	FIXED		
	BHR4		
24.45-24.65 GHz	**24.45-24.65 GHz**	FIXED	
FIXED	FIXED **BHR3**		
INTER-SATELLITE	INTER-SATELLITE		
	BHR4		
24.65-24.75 GHz	**24.65-24.75 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space) ***5.532B***	FIXED-SATELLITE (Earth-to-space)		
INTER-SATELLITE	INTER-SATELLITE		
	BHR4		
24.75-25.25 GHz	**24.75-25.25 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space) ***5.532B***	FIXED-SATELLITE (Earth-to-space)		
	BHR4		
25.25-25.5 GHz	**25.25-25.5 GHz**	FIXED	Refer to the ITU Radio Regulation Article 26
FIXED	FIXED **BHR3**		
INTER-SATELLITE ***5.536***	INTER-SATELLITE		
MOBILE	MOBILE		
Standard frequency and time signal-satellite (Earth-to-space)	Standard frequency and time signal-satellite (Earth-to-space)		
	BHR4		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
25.5-27 GHz	**25.5-27 GHz**	FIXED	Refer to the ITU Radio Regulation Article 26
EARTH EXPLORATION-SATELLITE	EARTH EXPLORATION-SATELLITE		
(space-to Earth) ***5.536B***	(space-to Earth)		
FIXED	FIXED **BHR3**		
INTER-SATELLITE ***5.536***	INTER-SATELLITE		
MOBILE	MOBILE		
SPACE RESEARCH (space-to-Earth) ***5.536C***	SPACE RESEARCH (space-to-Earth)		
Standard frequency and time signal-satellite (Earth-to-space) ***5.536A***	Standard frequency and time signal-satellite (Earth-to-space)		
	BHR4		
27-27.5 GHz	**27-27.5 GHz**		
FIXED	FIXED		
INTER-SATELLITE ***5.536***	INTER-SATELLITE		
MOBILE	MOBILE		
27.5-28.5 GHz	**27.5-28.5 GHz**	FIXED	
FIXED 5.537A	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space) ***5.484A 5.516B 5.539***	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
5.538 5.540			
28.5-29.1 GHz	**28.5-29.1 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space) ***5.484A 5.516B 5.523A 5.539***	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
Earth exploration-satellite (Earth-to-space) ***5.541***	Earth exploration-satellite (Earth-to-space)		
5.540			
29.1-29.5 GHz	**29.1-29.5 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space)	FIXED-SATELLITE (Earth-to-space)		
5.516B 5.523C 5.523E 5.535A 5.539			
5.541A	MOBILE		
MOBILE	Earth exploration-satellite (Earth-to-space)		
Earth exploration-satellite (Earth-to-space) ***5.541***			
5.540			

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
29.5-29.9 GHz FIXED-SATELLITE (Earth-to-space) ***5.484A*** ***5.484B*** ***5.516B*** ***5.539*** ***5.527A*** Earth exploration-satellite (Earth-to-space) ***5.541*** Mobile-satellite (Earth-to-space) ***5.540*** ***5.542***	**29.5-29.9 GHz** FIXED-SATELLITE (Earth-to-space) Earth exploration-satellite (Earth-to-space) Mobile-satellite (Earth-to-space) Fixed Mobile		VSAT uplink
29.9-30 GHz FIXED-SATELLITE (Earth-to-space) ***5.484A*** ***5.484B*** ***5.516B*** ***5.539*** ***5.527A*** MOBILE-SATELLITE (Earth-to-space) Earth exploration-satellite (Earth-to-space) ***5.541*** ***5.543*** ***5.525*** ***5.526*** ***5.527*** ***5.538*** ***5.540*** ***5.542***	**29.9-30 GHz** FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) Earth exploration-satellite (Earth-to-space) Fixed Mobile		VSAT uplink
30-31 GHz FIXED-SATELLITE (Earth-to-space) ***5.338A*** MOBILE-SATELLITE (Earth-to-space) Standard frequency and time signal-satellite (space-to-Earth) ***5.542***	**30-31 GHz** FIXED-SATELLITE (Earth-to-space) MOBILE-SATELLITE (Earth-to-space) Standard frequency and time signal-satellite (space-to-Earth) Fixed Mobile		Refer to the ITU Radio Regulation Article 26 VSAT uplink
31-31.3 GHz FIXED ***5.338A*** ***5.543A*** MOBILE Standard frequency and time signal-satellite (space-to-Earth) Space research ***5.544*** 5.545 ***5.149***	**31-31.3 GHz** FIXED **BHR3** MOBILE Standard frequency and time signal-satellite (space-to-Earth) Space research	FIXED	Refer to the ITU Radio Regulation Article 26
31.3-31.5 GHz EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive) ***5.340***	**31.3-31.5 GHz** EARTH EXPLORATION-SATELLITE (passive) RADIO ASTRONOMY SPACE RESEARCH (passive)		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
31.5-31.8 GHz	**31.5-31.8 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
Fixed	Fixed **BHR 3**		
Mobile except aeronautical mobile	Mobile except aeronautical mobile		
5.149 ***5.546***			
31.8-32 GHz	**31.8-32 GHz**	FIXED	
FIXED ***5.547A***	FIXED **BHR3**		
RADIONAVIGATION	SPACE RESEARCH (deep space) (space-to-Earth)		
SPACE RESEARCH (deep space) (space-to-Earth)			
5.547 5.547B ***5.548***			
32-32.3 GHz	**32-32.3 GHz**	FIXED	
FIXED ***5.547A***	FIXED **BHR3**		
RADIONAVIGATION			
SPACE RESEARCH (deep space) (space-to-Earth)	SPACE RESEARCH (deep space) (space-to-Earth)		
5.547 5.547C ***5.548***			
32.3-33 GHz	**32.3-33 GHz**	FIXED	
FIXED ***5.547A***	FIXED **BHR3**		
INTER-SATELLITE	INTER-SATELLITE		
RADIONAVIGATION			
5.547 5.547D ***5.548***			
33-33.4 GHz	**33-33.4 GHz**	FIXED	
FIXED ***5.547A***	FIXED **BHR3**		
RADIONAVIGATION			
5.547 5.547E			
33.4-34.2 GHz	**33.4-34.2 GHz**		
RADIOLOCATION	RADIOLOCATION		
5.549	FIXED		
	MOBILE		
34.2-34.7 GHz	**34.2-34.7 GHz**		
RADIOLOCATION	RADIOLOCATION		
SPACE RESEARCH (deep space) (Earth-to-space)	SPACE RESEARCH (deep space) (Earth-to-space)		
5.549	FIXED		
	MOBILE		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
34.7-35.2 GHz	**34.7-35.2 GHz**		
RADIOLOCATION	RADIOLOCATION		
Space research 5.550	FIXED		
5.549	MOBILE		
	Space research		
35.2-35.5 GHz	**35.2-35.5 GHz**		
METEOROLOGICAL AIDS	METEOROLOGICAL AIDS		
RADIOLOCATION	RADIOLOCATION		
5.549	FIXED		
	MOBILE		
35.5-36 GHz	**35.5-36 GHz**		
METEOROLOGICAL AIDS	METEOROLOGICAL AIDS		
EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)		
RADIOLOCATION	RADIOLOCATION		
SPACE RESEARCH (active)	SPACE RESEARCH (active)		
5.549 5.549A	FIXED		
	MOBILE		
36-37 GHz	**36-37 GHz**	FIXED	
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
FIXED	FIXED **BHR3**		
MOBILE	MOBILE		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.149 5.550A			
37-37.5 GHz	**37-37.5 GHz**	FIXED	
FIXED	FIXED **BHR3**		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
SPACE RESEARCH (space-to-Earth)	SPACE RESEARCH (space-to-Earth)		
5.547			
37.5-38 GHz	**37.5-38 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
SPACE RESEARCH (space-to-Earth)	SPACE RESEARCH (space-to-Earth)		
Earth exploration-satellite (space-to-Earth)	Earth exploration-satellite (space-to-Earth)		
5.547			

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
38-39.5 GHz	**38-39.5 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
MOBILE	MOBILE		
Earth exploration-satellite (space-to-Earth)	Earth exploration-satellite (space-to-Earth)		
5.547			
39.5-40 GHz	**39.5-40 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth) ***5.516B***	FIXED-SATELLITE (space-to-Earth)		
MOBILE	MOBILE		
MOBILE-SATELLITE (space-to-Earth)	MOBILE-SATELLITE (space-to-Earth)		
Earth exploration-satellite (space-to-Earth)	Earth exploration-satellite (space-to-Earth)		
5.547			
40-40.5 GHz	**40-40.5 GHz**	FIXED	
EARTH EXPLORATION-SATELLITE (Earth-to-space)	EARTH EXPLORATION-SATELLITE (Earth-to-space)		
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth) ***5.516B***	FIXED-SATELLITE (space-to-Earth)		
MOBILE	MOBILE		
MOBILE-SATELLITE (space-to-Earth)	MOBILE-SATELLITE (space-to-Earth)		
SPACE RESEARCH (Earth-to-space)	SPACE RESEARCH (Earth-to-space)		
Earth exploration-satellite (space-to-Earth)	Earth exploration-satellite (space-to-Earth)		
40.5-41 GHz	**40.5-41 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
BROADCASTING	BROADCASTING		
BROADCASTING-SATELLITE	BROADCASTING-SATELLITE		
Mobile	Mobile		
5.547			

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
41-42.5 GHz	**41-42.5 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (space-to-Earth) ***5.516B***	FIXED-SATELLITE (space-to-Earth)		
BROADCASTING	BROADCASTING		
BROADCASTING-SATELLITE	BROADCASTING-SATELLITE		
Mobile	Mobile		
5.547 5.551F ***5.551H*** ***5.551I***			
42.5-43.5 GHz	**42.5-43.5 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space) ***5.552***	FIXED-SATELLITE (Earth-to-space)		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
RADIO ASTRONOMY	RADIO ASTRONOMY		
5.149 ***5.547***			
43.5-47 GHz	**43.5-47 GHz**		
MOBILE ***5.553***	MOBILE		
MOBILE-SATELLITE	MOBILE-SATELLITE		
RADIONAVIGATION	RADIONAVIGATION		
RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE		
5.554			
47-47.2 GHz	**47-47.2 GHz**		Maximum power for Amateur is 50W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
AMATEUR-SATELLITE	AMATEUR-SATELLITE		
47.2-47.5 GHz	**47.2-47.5 GHz**		
FIXED	FIXED		
FIXED-SATELLITE (Earth-to-space) ***5.552***	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
5.552A			
47.5-47.9 GHz	**47.5-47.9 GHz**		
FIXED	FIXED		
FIXED-SATELLITE (Earth-to-space) ***5.552*** (space-to-Earth) ***5.516B*** ***5.554A***	FIXED-SATELLITE (Earth-to-space) (space-to-Earth)		
MOBILE	MOBILE		
47.9-48.2 GHz	**47.9-48.2 GHz**		
FIXED	FIXED		
FIXED-SATELLITE (Earth-to-space) ***5.552***	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
5.552A			

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
48.2-48.54 GHz	**48.2-48.54 GHz**		
FIXED	FIXED		
FIXED-SATELLITE (Earth-to-space) *5.552* (space-to-Earth) *5.516B* *5.554A* *5.555B*	FIXED-SATELLITE (Earth-to-space) (space-to-Earth)		
MOBILE	MOBILE		
48.54-49.44 GHz	**48.54-49.44 GHz**	FIXED	The band 48.94-49.04 GHz is also allocated to the radio astronomy service on a primary basis
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space) *5.552*	FIXED-SATELLITE (Earth-to-space)		
MOBILE			
5.149 *5.340* *5.555*	MOBILE		
49.44-50.2 GHz	**49.44-50.2 GHz**	FIXED	
FIXED	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space) *5.338A* *5.552* (space-to-Earth) *5.516B* *5.554A* *5.555B*	FIXED-SATELLITE (Earth-to-space) (space-to-Earth)		
MOBILE	MOBILE		
50.2-50.4 GHz	**50.2-50.4 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340			
50.4-51.4 GHz	**50.4-51.4 GHz**		
FIXED	FIXED		
FIXED-SATELLITE (Earth-to-space) *5.338A*	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
Mobile-satellite (Earth-to-space)	Mobile-satellite (Earth-to-space)		
51.4-52.6 GHz	**51.4-52.6 GHz**	FIXED	In the bands 51.4-54.25 GHz, 58.2-59 GHz and 64-65 GHz, radio astronomy observations may be carried out under national arrangements
FIXED *5.338A*	FIXED **BHR3**		
MOBILE	MOBILE		
5.547 *5.556*			
52.6-54.25 GHz	**52.6-54.25 GHz**		In the bands 51.4-54.25 GHz, 58.2-59 GHz and 64-65 GHz, radio astronomy observations may be carried out under national arrangements
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340 *5.556*			

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
54.25-55.78 GHz	**54.25-55.78 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
INTER-SATELLITE ***5.556A***	INTER-SATELLITE		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.556B			
55.78-56.9 GHz	**55.78-56.9 GHz**	FIXED	
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
FIXED ***5.557A***	FIXED **BHR3**		
INTER-SATELLITE ***5.556A***	INTER-SATELLITE		
MOBILE ***5.558***	MOBILE		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.547 5.557			
56.9-57 GHz	**56.9-57 GHz**	FIXED	
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
FIXED	FIXED **BHR3**		
INTER-SATELLITE ***5.558A***	INTER-SATELLITE		
MOBILE ***5.558***	MOBILE		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.547 5.557			
57-58.2 GHz	**57-58.2 GHz**	FIXED	
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
FIXED	FIXED **BHR3**		
INTER-SATELLITE ***5.556A***	INTER-SATELLITE		
MOBILE ***5.558***	MOBILE		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.547 5.557	**BHR4**		
58.2-59 GHz	**58.2-59 GHz**	FIXED	
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
FIXED	FIXED **BHR3**		
MOBILE	MOBILE		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.547 5.556	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
59-59.3 GHz	**59-59.3 GHz**	FIXED	
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
FIXED	FIXED **BHR3**		
INTER-SATELLITE ***5.556A***	INTER-SATELLITE		
MOBILE ***5.558***	MOBILE		
RADIOLOCATION ***5.559***	RADIOLOCATION		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
	BHR4		
59.3-64 GHz	**59.3-64 GHz**	FIXED	
FIXED	FIXED **BHR3**		
INTER-SATELLITE	INTER-SATELLITE		
MOBILE ***5.558***	MOBILE		
RADIOLOCATION ***5.559***	RADIOLOCATION		
5.138	**BHR4**		
64-65 GHz	**64-65 GHz**	FIXED	
FIXED	FIXED **BHR3**		
INTER-SATELLITE	INTER-SATELLITE		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
5.547 ***5.556***	**BHR4**		
65-66 GHz	**65-66 GHz**	FIXED	
EARTH EXPLORATION-SATELLITE	EARTH EXPLORATION-SATELLITE		
FIXED	FIXED **BHR3**		
INTER-SATELLITE	INTER-SATELLITE		
MOBILE except aeronautical mobile	MOBILE except aeronautical mobile		
SPACE RESEARCH	SPACE RESEARCH		
5.547	**BHR4**		
66-71 GHz	**66-71 GHz**		
INTER-SATELLITE	INTER-SATELLITE		
MOBILE ***5.553*** ***5.558***	MOBILE		
MOBILE-SATELLITE	MOBILE-SATELLITE		
RADIONAVIGATION	RADIONAVIGATION		
RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE		
5.554			

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
71-74 GHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth)	**71-74 GHz** FIXED **BHR3** FIXED-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (space-to-Earth)	FIXED	Paired with 81 – 86 GHz
74-76 GHz FIXED FIXED-SATELLITE (space-to-Earth) MOBILE BROADCASTING BROADCASTING-SATELLITE Space research (space-to-Earth) ***5.561***	**74-76 GHz** FIXED **BHR3** FIXED-SATELLITE (space-to-Earth) MOBILE BROADCASTING BROADCASTING-SATELLITE Space research (space-to-Earth) **BHR4**	FIXED	Paired with 81 – 86 GHz
76-77.5 GHz RADIO ASTRONOMY RADIOLOCATION Amateur Amateur-satellite Space research (space-to-Earth) ***5.149***	**76-77.5 GHz** RADIO ASTRONOMY RADIOLOCATION Amateur **BHR2** Amateur-satellite Space research (space-to-Earth) **BHR4**		Maximum power for Amateur is 100W (e.i.r.p).
77.5-78 GHz AMATEUR AMATEUR-SATELLITE RADIOLOCATION ***5.559B*** Radio astronomy Space research (space-to-Earth) ***5.149***	**77.5-78 GHz** AMATEUR **BHR2** AMATEUR-SATELLITE RADIOLOCATION Radio astronomy Space research (space-to-Earth) **BHR4**		Maximum power for Amateur is 100W (e.i.r.p).
78-79 GHz RADIOLOCATION Amateur Amateur-satellite Radio astronomy Space research (space-to-Earth) ***5.149*** ***5.560***	**78-79 GHz** RADIOLOCATION Amateur **BHR2** Amateur-satellite Radio astronomy Space research (space-to-Earth) **BHR4**		Maximum power for Amateur is 100W (e.i.r.p).

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
79-81 GHz	**79-81 GHz**		Maximum power for Amateur is 100W (e.i.r.p).
RADIO ASTRONOMY	RADIO ASTRONOMY		
RADIOLOCATION	RADIOLOCATION		
Amateur	Amateur **BHR2**		
Amateur-satellite	Amateur-satellite		
Space research (space-to-Earth)	Space research (space-to-Earth)		
5.149	**BHR4**		
81-84 GHz	**81-84 GHz**	FIXED	Paired with 71 – 76 GHz
FIXED *5.338A*	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space)	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
MOBILE-SATELLITE (Earth-to-space)	MOBILE-SATELLITE (Earth-to-space)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
Space research (space-to-Earth)	Space research (space-to-Earth)		
5.149 *5.561A*	**BHR4**		
84-86 GHz	**84-86 GHz**	FIXED	Paired with 71 – 76 GHz
FIXED *5.338A*	FIXED **BHR3**		
FIXED-SATELLITE (Earth-to-space) 5.561B	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
5.149	**BHR4**		
86-92 GHz	**86-92 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340			
92-94 GHz	**92-94 GHz**	FIXED	
FIXED *5.338A*	FIXED **BHR3**		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
RADIOLOCATION	RADIOLOCATION		
5.149			

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
94-94.1 GHz	**94-94.1 GHz**		
EARTH EXPLORATION-SATELLITE (active)	EARTH EXPLORATION-SATELLITE (active)		
RADIOLOCATION	RADIOLOCATION		
SPACE RESEARCH (active)	SPACE RESEARCH (active)		
Radio astronomy	Radio astronomy		
5.562 5.562A			
94.1-95 GHz	**94.1-95 GHz**	FIXED	
FIXED	FIXED **BHR3**		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
RADIOLOCATION	RADIOLOCATION		
5.149			
95-100 GHz	**95-100 GHz**		
FIXED	FIXED		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
RADIOLOCATION	RADIOLOCATION		
RADIONAVIGATION	RADIONAVIGATION		
RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE		
5.149 5.554			
100-102 GHz	**100-102 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340 5.341			
102-105 GHz	**102-105 GHz**		
FIXED	FIXED		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
5.149 5.341			
105-109.5 GHz	**105-109.5 GHz**		
FIXED	FIXED		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive) ***5.562B***	SPACE RESEARCH (passive)		
5.149 5.341			

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
109.5-111.8 GHz	**109.5-111.8 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340 5.341			
111.8-114.25 GHz	**111.8-114.25 GHz**		
FIXED	FIXED		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive) ***5.562B***	SPACE RESEARCH (passive)		
5.149 5.341			
114.25-116 GHz	**114.25-116 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340 5.341			
116-119.98 GHz	**116-119.98 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
INTER-SATELLITE ***5.562C***	INTER-SATELLITE		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.341			
119.98-122.25 GHz	**119.98-122.25 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
INTER-SATELLITE ***5.562C***	INTER-SATELLITE		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.138 5.341	**BHR4**		
122.25-123 GHz	**122.25-123 GHz**		Maximum power for Amateur is 100W (e.i.r.p).
FIXED	FIXED		
INTER-SATELLITE	INTER-SATELLITE		
MOBILE ***5.558***	MOBILE		
Amateur	Amateur **BHR2**		
5.138	**BHR4**		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
123-130 GHz	**123-130 GHz**		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
MOBILE-SATELLITE (space-to-Earth)	MOBILE-SATELLITE (space-to-Earth)		
RADIONAVIGATION	RADIONAVIGATION		
RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE		
Radio astronomy 5.562D	Radio astronomy		
5.149 5.554			
130-134 GHz	**130-134 GHz**		
EARTH EXPLORATION-SATELLITE (active) ***5.562E***	EARTH EXPLORATION-SATELLITE (active)		
FIXED	FIXED		
INTER-SATELLITE	INTER-SATELLITE		
MOBILE ***5.558***	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
5.149 5.562A			
134-136 GHz	**134-136 GHz**		Maximum power for Amateur is 100W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
AMATEUR-SATELLITE	AMATEUR-SATELLITE		
Radio astronomy	Radio astronomy		
136-141 GHz	**136-141 GHz**		Maximum power for Amateur is 100W (e.i.r.p).
RADIO ASTRONOMY	RADIO ASTRONOMY		
RADIOLOCATION	RADIOLOCATION		
Amateur	Amateur **BHR2**		
Amateur-satellite	Amateur-satellite		
5.149			
141-148.5 GHz	**141-148.5 GHz**		
FIXED	FIXED		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
RADIOLOCATION	RADIOLOCATION		
5.149			
148.5-151.5 GHz	**148.5-151.5 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340			

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
151.5-155.5 GHz	**151.5-155.5 GHz**		
FIXED	FIXED		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
RADIOLOCATION	RADIOLOCATION		
5.149			
155.5-158.5 GHz	**155.5-158.5 GHz**		In the band 155.5-158.5 GHz, the allocation to the Earth exploration-satellite (passive) and space research (passive) services shall terminate on 1 January 2018
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
FIXED	FIXED		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive) ***5.562B***	SPACE RESEARCH (passive)		
5.149 5.562F 5.562G			
158.5-164 GHz	**158.5-164 GHz**		
FIXED	FIXED		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
MOBILE	MOBILE		
MOBILE-SATELLITE (space-to-Earth)	MOBILE-SATELLITE (space-to-Earth)		
164-167 GHz	**164-167 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340			
167-174.5 GHz	**167-174.5 GHz**		
FIXED	FIXED		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
INTER-SATELLITE	INTER-SATELLITE		
MOBILE ***5.558***	MOBILE		
5.149 5.562D			
174.5-174.8 GHz	**174.5-174.8 GHz**		
FIXED	FIXED		
INTER-SATELLITE	INTER-SATELLITE		
MOBILE ***5.558***	MOBILE		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
174.8-182 GHz	**174.8-182 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
INTER-SATELLITE ***5.562H***	INTER-SATELLITE		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
182-185 GHz	**182-185 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340			
185-190 GHz	**185-190 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
INTER-SATELLITE ***5.562H***	INTER-SATELLITE		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
190-191.8 GHz	**190-191.8 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340			
191.8-200 GHz	**191.8-200 GHz**		
FIXED	FIXED		
INTER-SATELLITE	INTER-SATELLITE		
MOBILE ***5.558***	MOBILE		
MOBILE-SATELLITE	MOBILE-SATELLITE		
RADIONAVIGATION	RADIONAVIGATION		
RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE		
5.149 5.341 5.554			
200-209 GHz	**200-209 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340 5.341 5.563A			
209-217 GHz	**209-217 GHz**		
FIXED	FIXED		
FIXED-SATELLITE (Earth-to-space)	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
5.149 5.341			

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
217-226 GHz	**217-226 GHz**		
FIXED	FIXED		
FIXED-SATELLITE (Earth-to-space)	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive) ***5.562B***	SPACE RESEARCH (passive)		
5.149 ***5.341***			
226-231.5 GHz	**226-231.5 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340			
231.5-232 GHz	**231.5-232 GHz**		
FIXED	FIXED		
MOBILE	MOBILE		
Radiolocation	Radiolocation		
232-235 GHz	**232-235 GHz**		
FIXED	FIXED		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
MOBILE	MOBILE		
Radiolocation	Radiolocation		
235-238 GHz	**235-238 GHz**		The band 237.9-238 GHz is also allocated to the Earth exploration-satellite service (active) and the space research service (active) for spaceborne cloud radars only
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.563A ***5.563B***			
238-240 GHz	**238-240 GHz**		
FIXED	FIXED		
FIXED-SATELLITE (space-to-Earth)	FIXED-SATELLITE (space-to-Earth)		
MOBILE	MOBILE		
RADIOLOCATION	RADIOLOCATION		
RADIONAVIGATION	RADIONAVIGATION		
RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE		

RR Region 1 Allocations	The Kingdom's National Frequency Allocations	Major Utilisation	Additional Information
240-241 GHz	**240-241 GHz**		
FIXED	FIXED		
MOBILE	MOBILE		
RADIOLOCATION	RADIOLOCATION		
241-248 GHz	**241-248 GHz**		Maximum power for Amateur is 100W (e.i.r.p).
RADIO ASTRONOMY	RADIO ASTRONOMY		
RADIOLOCATION	RADIOLOCATION		
Amateur	Amateur **BHR2**		
Amateur-satellite	Amateur-satellite		
5.138 5.149	**BHR4**		
248-250 GHz	**248-250 GHz**		Maximum power for Amateur is 100W (e.i.r.p).
AMATEUR	AMATEUR **BHR2**		
AMATEUR-SATELLITE	AMATEUR-SATELLITE		
Radio astronomy	Radio astronomy		
5.149	**BHR4**		
250-252 GHz	**250-252 GHz**		
EARTH EXPLORATION-SATELLITE (passive)	EARTH EXPLORATION-SATELLITE (passive)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
SPACE RESEARCH (passive)	SPACE RESEARCH (passive)		
5.340 5.563A			
252-265 GHz	**252-265 GHz**		
FIXED	FIXED		
MOBILE	MOBILE		
MOBILE-SATELLITE (Earth-to-space)	MOBILE-SATELLITE (Earth-to-space)		
RADIO ASTRONOMY	RADIO ASTRONOMY		
RADIONAVIGATION	RADIONAVIGATION		
RADIONAVIGATION-SATELLITE	RADIONAVIGATION-SATELLITE		
5.149 5.554			
265-275 GHz	**265-275 GHz**		
FIXED	FIXED		
FIXED-SATELLITE (Earth-to-space)	FIXED-SATELLITE (Earth-to-space)		
MOBILE	MOBILE		
RADIO ASTRONOMY	RADIO ASTRONOMY		
5.149 5.563A			
275-3 000 GHz	**275-3 000 GHz**		
(Not allocated) ***5.565***	(Not allocated)		

الملحق رقم 1 دليل الاختصارات والمصطلحات والتعاريف التفصيلية

AIS	Automatic Identification System
Appendix 4	Appendix 4 of the Radio Regulations: Consolidated list and tables of characteristics for use in the application of the procedures of Chapter III
Appendix 5	Appendix 5 of the Radio Regulations: Identification of administrations with which coordination is to be effected or agreement sought under the provisions of Article 9
Appendix 17	Appendix 17 of the Radio Regulations: Frequencies and channeling arrangements in the high-frequency bands for the maritime mobile service
Appendix 18	Appendix 18 of the Radio Regulations: Table of transmitting frequencies in the VHF maritime mobile band
Appendix 30	Appendix 30 of the Radio Regulations: Provisions for all services and associated plans and list for the broadcasting-satellite service in the frequency bands 11.7-12.2 GHz (in Region 3), 11.7-12.5 GHz (in Region 1) and 12.2-12.7 GHz (in Region 2)
Appendix 30A	Appendix 30A of the Radio Regulations: Provisions and associated plans and list for feeder links for the broadcasting-satellite service (11.7-12.5 GHz in Region 1, 12.2-12.7 GHz in Region 2 and 11.7-12.2 GHz in Region 3) in the frequency bands 14.5-14.8 GHz and 17.3-18.1 GHz in Regions 1 and 3, and 17.3-17.8 GHz in Region 2
Appendix 30B	Appendix 30B of the Radio Regulations: Provisions and associated plan for the fixed-satellite service in the frequency bands 4 500-4 800 MHz, 6 725-7 025 MHz, 10.70-10.95 GHz, 11.20-11.45 GHz and 12.75-13.25 GHz
Article 5	Article 5 of the Radio Regulations: Frequency allocations
Article 12	Article 12 of the Radio Regulations: Seasonal planning of the high frequency bands allocated to the broadcasting service between 5 900 kHz and 26 100 kHz
Article 23	Article 23 of the Radio Regulations: Broadcasting services
Article 26	Article 26 of the Radio Regulations: Standard frequency and time signal service
Article 31	Article 31 of the Radio Regulations: Frequencies for the global maritime distress and safety system (GMDSS)
ASMG	Arab Spectrum Management Group
BHR	Bahrain national footnote
BFWA	Broadband Fixed Wireless Access
DAB	Digital Audio Broadcasting
DME	Distance Measuring Equipment
e.i.r.p.	Equivalent isotropically radiated power - the product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna (absolute or isotropic gain)
FM	Frequency Modulation
GCC	Gulf Cooperation Council
GHz	Gigahertz (1 000 000 000 Hz)
GMDSS	Global Maritime Distress and Safety System
GPS	Global Positioning System
HAPS	High-Altitude Platform System
HF	High Frequency (Short Wave)
Hz	Hertz, the unit of frequency measurement
ICAO	International Civil Aviation Organization
IMT	International Mobile Telecommunications
ISM	Industrial, Scientific and Medical applications
ITU	International Telecommunication Union
ITU Geneva 1975 plan (GE75)	Plan for the assignment of frequencies to broadcasting stations in the medium frequency bands in Regions 1 and 3 and in the low frequency bands in Region 1
ITU Geneva 1984 plan (GE84)	Frequency assignment plan for FM sound broadcasting stations in Region 1 and part of Region 3 in the band 87.5-108 MHz

ITU Geneva 2006 plan (GE06)	The Plans for VHF/UHF analogue and digital broadcasting in parts of Regions 1 and 3, in the frequency bands 174-230 MHz and 470-862 MHz, Geneva 2006
ITU RR	ITU Radio Regulation
ITU-R	The Radiocommunication Sector of the ITU
kHz	kilohertz (1 000 Hz)
MHz	Megahertz (1 000 000 Hz)
NAVTEX	Navigation Text Messaging system
NFP	National Frequency Plan
PMR	Private (or Professional) Mobile Radio
PPDR	Public Protection and Disaster Relief
SAB	Services Ancillary to Broadcasting
SART	Search and Rescue Transponder
SRD	Short Range Device
SSCC	Spectrum Strategy and Coordination Committee (of Bahrain)
TDD	Time Division Duplex
VSAT	Very Small Aperture Terminal
VTS	Vessel Traffic Services

Aeronautical mobile (OR) service

An aeronautical mobile service intended for communications, including those relating to flight coordination, primarily outside national or international civil air routes.

Aeronautical mobile (R) service

An aeronautical mobile service reserved for communications relating to safety and regularity of flight, primarily along national or international civil air routes.

Aeronautical mobile service

A mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radiobeacon stations may also participate in this service on designated distress and emergency frequencies.

Aeronautical mobile-satellite (R) service

An aeronautical mobile-satellite service reserved for communications relating to safety and regularity of flights, primarily along national or international civil air routes.

Aeronautical mobile-satellite service

A mobile-satellite service in which mobile earth stations are located on board aircraft; survival craft stations and emergency position-indicating radiobeacon stations may also participate in this service.

Aeronautical radionavigation service

A radionavigation service intended for the benefit and for the safe operation of aircraft.

Aeronautical radionavigation-satellite service

A radionavigation-satellite service in which earth stations are located on board aircraft.

Amateur service

A radiocommunication service for the purpose of self-training, intercommunication and technical investigations carried out by amateurs, that is, by duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.

Amateur-satellite service

A radiocommunication service using space stations on earth satellites for the same purposes as those of the amateur service.

Broadcasting service

A radiocommunication service in which the transmissions are intended for direct reception by the general public. This service may include sound transmissions, television transmissions or other types of transmission.

Broadcasting-satellite service

A radiocommunication service in which signals transmitted or retransmitted by space stations are intended for direct reception by the general public.
In the broadcasting-satellite service, the term "direct reception" shall encompass both individual reception and community reception.

Deep space

Space at distances from the Earth equal to, or greater than, 2 × 106 km.

Earth exploration-satellite service

A radiocommunication service between earth stations and one or more space stations, which may include links between space stations, in which:
– information relating to the characteristics of the Earth and its natural phenomena, including data relating to the state of the environment, is obtained from active sensors or passive sensors on Earth satellites;
– similar information is collected from airborne or Earth-based platforms;
– such information may be distributed to earth stations within the system concerned;
– platform interrogation may be included.

This service may also include feeder links necessary for its operation.

Fixed service

A radiocommunication service between specified fixed points.

Fixed-satellite service

A radiocommunication service between earth stations at given positions, when one or more satellites are used; the given position may be a specified fixed point or any fixed point within specified areas; in some cases this service includes satellite-to-satellite links, which may also be operated in the inter-satellite service; the fixed-satellite service may also include feeder links for other space radiocommunication services.

Harmful interference

Interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs, or repeatedly interrupts a radiocommunication service operating in accordance with Radio Regulations.

Industrial, scientific and medical (ISM) applications (of radio frequency energy)
Operation of equipment or appliances designed to generate and use locally radio frequency energy for industrial, scientific, medical, domestic or similar purposes, excluding applications in the field of telecommunications.

Instrument landing system

A radionavigation system which provides aircraft with horizontal and vertical guidance just before and during landing and, at certain fixed points, indicates the distance to the reference point of landing.

Interference

The effect of unwanted energy due to one or a combination of emissions, radiations, or inductions upon reception in a radiocommunication system, manifested by any performance degradation, misinterpretation, or loss of information which could be extracted in the absence of such unwanted energy.

Inter-satellite service

A radiocommunication service providing links between artificial satellites.

Land mobile service

A mobile service between base stations and land mobile stations, or between land mobile stations.

Maritime mobile service

A mobile service between coast stations and ship stations, or between ship stations, or between associated on-board communication stations; survival craft stations and emergency position-indicating radiobeacon stations may also participate in this service.

Maritime mobile-satellite service

A mobile-satellite service in which mobile earth stations are located on board ships; survival craft stations and emergency position-indicating radiobeacon stations may also participate in this service.

Maritime radionavigation service

A radionavigation service intended for the benefit and for the safe operation of ships.

Maritime radionavigation-satellite service

A radionavigation-satellite service in which earth stations are located on board ships.

Meteorological aids service

A radiocommunication service used for meteorological, including hydrological, observations and exploration.

Meteorological-satellite service

An earth exploration-satellite service for meteorological purposes.

Mobile service

A radiocommunication service between mobile and land stations, or between mobile stations.

Mobile-satellite service

A radiocommunication service

– between mobile earth stations and one or more space stations, or between space stations used by this service; or
– between mobile earth stations by means of one or more space stations.
This service may also include feeder links necessary for its operation.

Radar

A radiodetermination system based on the comparison of reference signals with radio signals reflected, or retransmitted, from the position to be determined.

Radar beacon (racon)

A transmitter-receiver associated with a fixed navigational mark which, when triggered by a radar, automatically returns a distinctive signal which can appear on the display of the triggering radar, providing range, bearing and identification information.

Radio astronomy

Astronomy based on the reception of radio waves of cosmic origin.

Radio astronomy service

A service involving the use of radio astronomy.

Radiocommunication service

A service involving the transmission, emission and/or reception of radio waves for specific telecommunication purposes.

Radiodetermination

The determination of the position, velocity and/or other characteristics of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of radio waves.

Radiodetermination service

A radiocommunication service for the purpose of radiodetermination.

Radiodetermination-satellite service

A radiocommunication service for the purpose of radiodetermination involving the use of one or more space stations.

This service may also include feeder links necessary for its own operation.

Radiolocation

Radiodetermination used for purposes other than those of radionavigation.

Radiolocation service

A radiodetermination service for the purpose of radiolocation.

Radiolocation-satellite service

A radiodetermination-satellite service used for the purpose of radiolocation.
This service may also include the feeder links necessary for its operation.

Radionavigation

Radiodetermination used for the purposes of navigation, including obstruction warning.

Radionavigation service

A radiodetermination service for the purpose of radionavigation.

Radionavigation-satellite service

A radiodetermination-satellite service used for the purpose of radionavigation. This service may also include feeder links necessary for its operation.

Safety service

Any radiocommunication service used permanently or temporarily for the safeguarding of human life and property.

Space research service

A radiocommunication service in which spacecraft or other objects in space are used for scientific or technological research purposes.

Space telemetry

The use of telemetry for the transmission from a space station of results of measurements made in a spacecraft, including those relating to the functioning of the spacecraft.

Standard frequency and time signal service

A radiocommunication service for scientific, technical and other purposes, providing the transmission of specified frequencies, time signals, or both, of stated high precision, intended for general reception.

Standard frequency and time signal-satellite service

A radiocommunication service using space stations on earth satellites for the same purposes as those of the standard frequency and time signal service.

This service may also include feeder links necessary for its operation.

Telecommunication

Any transmission, emission or reception of signs, signals, writings, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems.

Telemetry

The use of telecommunication for automatically indicating or recording measurements at a distance from the measuring instrument.

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5.53 Administrations authorizing the use of frequencies below 8.3 kHz shall ensure that no harmful interference is caused to services to which the bands above 8.3 kHz are allocated. (WRC-12)

5.54 Administrations conducting scientific research using frequencies below 8.3 kHz are urged to advise other administrations that may be concerned in order that such research may be afforded all practicable protection from harmful interference. (WRC-12)

5.54A Use of the 8.3-11.3 kHz frequency band by stations in the meteorological aids service is limited to passive use only. In the band 9-11.3 kHz, meteorological aids stations shall not claim protection from stations of the radionavigation service submitted for notification to the Bureau prior to 1 January 2013. For sharing between stations of the meteorological aids service and stations in the radionavigation service submitted for notification after this date, the most recent version of Recommendation ITU-R RS.1881 should be applied. (WRC-12)

5.54B *Additional allocation:* in Algeria, Saudi Arabia, Bahrain, Egypt, the United Arab Emirates, the Russian Federation, Iran (Islamic Republic of), Iraq, Kuwait, Lebanon, Morocco,Qatar, the Syrian Arab Republic, Sudan and Tunisia, the frequency band 8.3-9 kHz is also allocated to the radionavigation, fixed and mobile services on a primary basis. (WRC-15)

5.56 The stations of services to which the bands 14-19.95 kHz and 20.05-70 kHz and in Region 1 also the bands 72-84 kHz and 86-90 kHz are allocated may transmit standard frequency and time signals. Such stations shall be afforded protection from harmful interference. In Armenia, Azerbaijan, Belarus, the Russian Federation, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan, the frequencies 25 kHz and 50 kHz will be used for this purpose under the same conditions. (WRC-12)

5.57 The use of the bands 14-19.95 kHz, 20.05-70 kHz and 70-90 kHz (72-84 kHz and 86-90 kHz in Region 1) by the maritime mobile service is limited to coast radiotelegraph stations (A1A and F1B only). Exceptionally, the use of class J2B or J7B emissions is authorized subject to the necessary bandwidth not exceeding that normally used for class A1A or F1B emissions in the band concerned.

5.60 In the bands 70-90 kHz (70-86 kHz in Region 1) and 110-130 kHz (112-130 kHz in Region 1), pulsed radionavigation systems may be used on condition that they do not cause harmful interference to other services to which these bands are allocated.

5.62 Administrations which operate stations in the radionavigation service in the band 90-110 kHz are urged to coordinate technical and operating characteristics in such a way as to avoid harmful interference to the services provided by these stations.

5.64 Only classes A1A or F1B, A2C, A3C, F1C or F3C emissions are authorized for stations of the fixed service in the bands allocated to this service between 90 kHz and 160 kHz (148.5 kHz in Region 1) and for stations of the maritime mobile service in the bands allocated to this service between 110 kHz and 160 kHz (148.5 kHz in Region 1). Exceptionally, class J2B or J7B emissions are also authorized in the bands between 110 kHz and 160 kHz (148.5 kHz in Region 1) for stations of the maritime mobile service.

5.67A Stations in the amateur service using frequencies in the band 135.7-137.8 kHz shall not exceed a maximum radiated power of 1 W (e.i.r.p.) and shall not cause harmful interference to stations of the radionavigation service operating in countries listed in No. **5.67**. (WRC-07)

5.73 The band 285-325 kHz (283.5-325 kHz in Region 1) in the maritime radionavigation service may be used to transmit supplementary navigational information using narrow-band techniques, on condition that no harmful interference is caused to radiobeacon stations operating in the radionavigation service. (WRC-97)

5.74 *Additional Allocation:* in Region 1, the frequency band 285.3-285.7 kHz is also allocated to the maritime radionavigation service (other than radiobeacons) on a primary basis.

5.76 The frequency 410 kHz is designated for radio direction-finding in the maritime radionavigation service. The other radionavigation services to which the band 405-415 kHz is allocated shall not cause harmful interference to radio direction-finding in the band 406.5-413.5 kHz.

5.79A When establishing coast stations in the NAVTEX service on the frequencies 490 kHz, 518 kHz and 4 209.5 kHz, administrations are strongly recommended to coordinate the operating characteristics in accordance with the procedures of the International Maritime Organization (IMO) (see Resolution **339 (Rev.WRC-07)**). (WRC-07)

5.80A The maximum equivalent isotropically radiated power (e.i.r.p.) of stations in the amateur service using frequencies in the band 472-479 kHz shall not exceed 1 W. Administrations may increase this limit of e.i.r.p. to 5 W in portions of their territory which are at a distance of over 800 km from the borders of Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iran (Islamic Republic of), Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia, Ukraine and Yemen. In this frequency band, stations in the amateur service shall not cause harmful interference to, or claim protection from, stations of the aeronautical radionavigation service. (WRC-12)

5.80B The use of the frequency band 472-479 kHz in Algeria, Saudi Arabia, Azerbaijan, Bahrain, Belarus, China, Comoros, Djibouti, Egypt, United Arab Emirates, the Russian Federation, Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Mauritania, Oman, Uzbekistan, Qatar, Syrian Arab Republic, Kyrgyzstan, Somalia, Sudan, Tunisia and Yemen is limited to the maritime mobile and aeronautical radionavigation services. The amateur service shall not be used in the above-mentioned countries in this frequency band, and this should be taken into account by the countries authorizing such use. (WRC-12)

5.82 In the maritime mobile service, the frequency 490 kHz is to be used exclusively for the transmission by coast stations of navigational and meteorological warnings and urgent information to ships, by means of narrow-band direct-printing telegraphy. The conditions for use of the frequency 490 kHz are prescribed in Articles **31** and **52**. In using the frequency band 415-495 kHz for the aeronautical radionavigation service, administrations are requested to ensure that no harmful interference is caused to the frequency 490 kHz. In using the frequency band 472-479 kHz for the amateur service, administrations shall ensure that no harmful interference is caused to the frequency 490 kHz. (WRC-12)

5.84 The conditions for the use of the frequency 518 kHz by the maritime mobile service are prescribed in Articles **31** and **52**. (WRC-07)

5.92 Some countries of Region 1 use radiodetermination systems in the bands 1 606.5-1 625 kHz, 1 635-1 800 kHz, 1 850-2 160 kHz, 2 194-2 300 kHz, 2 502-2 850 kHz and 3 500-3 800 kHz, subject to agreement obtained under No. **9.21**. The radiated mean power of these stations shall not exceed 50 W.

5.99 *Additional allocation:* in Saudi Arabia, Austria, Iraq, Libya, Uzbekistan, Slovakia, Romania, Slovenia, Chad, and Togo, the band 1 810-1 830 kHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-12)

5.100 In Region 1, the authorization to use the band 1 810-1 830 kHz by the amateur service in countries situated totally or partially north of 40° N shall be given only after consultation with the countries mentioned in Nos. **5.98** and **5.99** to define the necessary steps to be taken to prevent harmful interference between amateur stations and stations of other services operating in accordance with Nos. **5.98** and **5.99**.

5.103 In Region 1, in making assignments to stations in the fixed and mobile services in the bands 1 850-2 045 kHz, 2 194-2 498 kHz, 2 502-2 625 kHz and 2 650-2 850 kHz, administrations should bear in mind the special requirements of the maritime mobile service.

5.104 In Region 1, the use of the band 2 025-2 045 kHz by the meteorological aids service is limited to oceanographic buoy stations.

5.107 *Additional allocation:* in Saudi Arabia, Eritrea, Ethiopia, Iraq, Libya, Somalia and Swaziland, the band 2 160-2 170 kHz is also allocated to the fixed and mobile, except aeronautical mobile (R), services on a primary basis. The mean power of stations in these services shall not exceed 50 W. (WRC-12)

5.108 The carrier frequency 2 182 kHz is an international distress and calling frequency for radiotelephony. The conditions for the use of the band 2 173.5-2 190.5 kHz are prescribed in Articles **31** and **52**. (WRC-07)

5.109 The frequencies 2 187.5 kHz, 4 207.5 kHz, 6 312 kHz, 8 414.5 kHz, 12 577 kHz and 16 804.5 kHz are international distress frequencies for digital selective calling. The conditions for the use of these frequencies are prescribed in Article **31**.

5.110 The frequencies 2 174.5 kHz, 4 177.5 kHz, 6 268 kHz, 8 376.5 kHz, 12 520 kHz and 16 695 kHz are international distress frequencies for narrow-band direct-printing telegraphy. The conditions for the use of these frequencies are prescribed in Article **31**.

5.111 The carrier frequencies 2 182 kHz, 3 023 kHz, 5 680 kHz, 8 364 kHz and the frequencies 121.5 MHz, 156.525 MHz, 156.8 MHz and 243 MHz may also be used, in accordance with the procedures in force for terrestrial radiocommunication services, for search and rescue operations concerning manned space vehicles. The conditions for the use of the frequencies are prescribed in Article **31**.

The same applies to the frequencies 10 003 kHz, 14 993 kHz and 19 993 kHz, but in each of these cases emissions must be confined in a band of ± 3 kHz about the frequency. (WRC-07)

5.113 For the conditions for the use of the bands 2 300-2 495 kHz (2 498 kHz in Region 1), 3 200-3 400 kHz, 4 750-4 995 kHz and 5 005-5 060 kHz by the broadcasting service, see Nos. **5.16** to **5.20**, **5.21** and **23.3** to **23.10**.

5.115 The carrier (reference) frequencies 3 023 kHz and 5 680 kHz may also be used, in accordance with Article **31**, by stations of the maritime mobile service engaged in coordinated search and rescue operations. (WRC-07)

5.116 Administrations are urged to authorize the use of the band 3 155-3 195 kHz to provide a common worldwide channel for low power wireless hearing aids. Additional channels for these devices may be assigned by administrations in the bands between 3 155 kHz and 3 400 kHz to suit local needs.

It should be noted that frequencies in the range 3 000 kHz to 4 000 kHz are suitable for hearing aid devices which are designed to operate over short distances within the induction field.

5.127 The use of the band 4 000-4 063 kHz by the maritime mobile service is limited to ship stations using radiotelephony (see No. **52.220** and Appendix **17**).

5.130 The conditions for the use of the carrier frequencies 4 125 kHz and 6 215 kHz are prescribed in Articles **31** and **52**. (WRC-07)

5.131 The frequency 4 209.5 kHz is used exclusively for the transmission by coast stations of meteorological and navigational warnings and urgent information to ships by means of narrow-band direct-printing techniques. (WRC-97)

5.132 The frequencies 4 210 kHz, 6 314 kHz, 8 416.5 kHz, 12 579 kHz, 16 806.5 kHz, 19 680.5 kHz, 22 376 kHz and 26 100.5 kHz are the international frequencies for the transmission of maritime safety information (MSI) (see Appendix **17**).

5.132A Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed or mobile services. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with Resolution **612 (Rev.WRC-12)**. (WRC-12)

5.133B Stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 15 W (e.i.r.p.). However, in Region 2 in Mexico, stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 20 W (e.i.r.p.). In the following Region 2 countries: Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Dominica, El Salvador, Ecuador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Saint Lucia, Saint Kitts and Nevis, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela, as well as the overseas territories of the Netherlands in Region 2, stations in the amateur service using the frequency band 5 351.5-5 366.5 kHz shall not exceed a maximum radiated power of 25 W (e.i.r.p.). (WRC-15)

5.134 The use of the bands 5 900-5 950 kHz, 7 300-7 350 kHz, 9 400-9 500 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 subject to the application of the procedure of Article **12**. Administrations are encouraged to use these bands to facilitate the introduction of digitally modulated emissions in accordance with the provisions of Resolution **517 (Rev.WRC-07)**. (WRC-07)

5.136 *Additional allocation:* frequencies in the band 5 900-5 950 kHz may be used by stations in the following services, communicating only within the boundary of the country in which they are located: fixed service (in all three Regions), land mobile service (in Region 1), mobile except aeronautical mobile (R) service (in Regions 2 and 3), 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. (WRC-07)

5.137 On condition that harmful interference is not caused to the maritime mobile service, the bands 6 200-6 213.5 kHz and 6 220.5-6 525 kHz may be used exceptionally by stations in the fixed service, communicating only within the boundary of the country in which they are located, with a mean power not exceeding 50 W. At the time of notification of these frequencies, the attention of the Bureau will be drawn to the above conditions.

5.138 The following bands:

6 765-6 795 kHz	(centre frequency 6 780 kHz),
433.05-434.79 MHz	(centre frequency 433.92 MHz) in Region 1 except in the countries mentioned in No. **5.280**,
61-61.5 GHz	(centre frequency 61.25 GHz),
122-123 GHz	(centre frequency 122.5 GHz), and
244-246 GHz	(centre frequency 245 GHz)

are designated for industrial, scientific and medical (ISM) applications. The use of these frequency bands for ISM applications shall be subject to special authorization by the administration concerned, in agreement with other administrations whose radiocommunication services might be affected. In applying this provision, administrations shall have due regard to the latest relevant ITU-R Recommendations.

5.141B *Additional allocation:* in Algeria, Saudi Arabia, Australia, Bahrain, Botswana, BruneiDarussalam, China, Comoros, Korea (Rep. of), Diego Garcia, Djibouti, Egypt, United ArabEmirates, Eritrea, Guinea, Indonesia, Iran (Islamic Republic of), Japan, Jordan, Kuwait, Libya,Mali, Morocco, Mauritania, Niger, New Zealand, Oman, Papua New Guinea, Qatar, the SyrianArab Republic, Singapore, Sudan, South Sudan, Tunisia, Viet Nam and Yemen, the frequency band7 100-7 200 kHz is also allocated to the fixed and the mobile, except aeronautical mobile (R),services on a primary basis. (WRC-15)

5.143 *Additional allocation:* frequencies in the band 7 300-7 350 kHz may be used by stations in the fixed service and in the land mobile 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 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. (WRC-07)

5.143B In Region 1, frequencies in the band 7 350-7 450 kHz may be used by stations in the fixed and land mobile 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. The total radiated power of each station shall not exceed 24 dBW. (WRC-12)

5.143C *Additional allocation:* in Algeria, Saudi Arabia, Bahrain, Comoros, Djibouti, Egypt, United Arab Emirates, Iran (Islamic Republic of), Jordan, Kuwait, Libya, Morocco, Mauritania, Niger, Oman, Qatar, the Syrian Arab Republic, Sudan, South Sudan, Tunisia and Yemen, the bands 7 350-7 400 kHz and 7 400-7 450 kHz are also allocated to the fixed service on a primary basis. (WRC-12)

5.145 The conditions for the use of the carrier frequencies 8 291 kHz, 12 290 kHz and 16 420 kHz are prescribed in Articles **31** and **52**. (WRC-07)

5.145A Stations in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the fixed service. Applications of the radiolocation service are limited to oceanographic radars operating in accordance with Resolution **612 (Rev.WRC-12)**. (WRC-12)

5.146 *Additional allocation:* frequencies in 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 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. (WRC-07)

5.147 On condition that harmful interference is not caused to the broadcasting service, frequencies in the bands 9 775-9 900 kHz, 11 650-11 700 kHz and 11 975-12 050 kHz may be used by stations in the fixed service communicating only within the boundary of the country in which they are located, each station using a total radiated power not exceeding 24 dBW.

5.149 In making assignments to stations of other services to which the bands:

13 360-13 410 kHz,	4 950-4 990 MHz,	102-109.5 GHz,
25 550-25 670 kHz,	4 990-5 000 MHz,	111.8-114.25 GHz,
37.5-38.25 MHz,	6 650-6 675.2 MHz,	128.33-128.59 GHz,
73-74.6 MHz in Regions 1 and 3,	10.6-10.68 GHz,	129.23-129.49 GHz,
150.05-153 MHz in Region 1,	14.47-14.5 GHz,	130-134 GHz,
322-328.6 MHz,	22.01-22.21 GHz,	136-148.5 GHz,
406.1-410 MHz,	22.21-22.5 GHz,	151.5-158.5 GHz,
608-614 MHz in Regions 1 and 3,	22.81-22.86 GHz,	168.59-168.93 GHz,
1 330-1 400 MHz,	23.07-23.12 GHz,	171.11-171.45 GHz,
1 610.6-1 613.8 MHz,	31.2-31.3 GHz,	172.31-172.65 GHz,
1 660-1 670 MHz,	31.5-31.8 GHz in Regions 1 and 3,	173.52-173.85 GHz,
1 718.8-1 722.2 MHz,	36.43-36.5 GHz,	195.75-196.15 GHz,
2 655-2 690 MHz,	42.5-43.5 GHz,	209-226 GHz,
3 260-3 267 MHz,	48.94-49.04 GHz,	241-250 GHz,
3 332-3 339 MHz,	76-86 GHz,	252-275 GHz
3 345.8-3 352.5 MHz,	92-94 GHz,	
4 825-4 835 MHz,	94.1-100 GHz,	

are allocated, administrations are urged to take all practicable steps to protect the radio astronomy service from harmful interference. Emissions from spaceborne or airborne stations can be particularly serious sources of interference to the radio astronomy service (see Nos. **4.5** and **4.6** and Article **29**). (WRC-07)

5.150 The following bands:

13 553-13 567 kHz	(centre frequency 13 560 kHz),
26 957-27 283 kHz	(centre frequency 27 120 kHz),
40.66-40.70 MHz	(centre frequency 40.68 MHz),
902-928 MHz	in Region 2 (centre frequency 915 MHz),
2 400-2 500 MHz	(centre frequency 2 450 MHz),
5 725-5 875 MHz	(centre frequency 5 800 MHz), and
24-24.25 GHz	(centre frequency 24.125 GHz)

are also designated for industrial, scientific and medical (ISM) applications. Radiocommunication services operating within these bands must accept harmful interference which may be caused by these applications. ISM equipment operating in these bands is subject to the provisions of No. **15.13**.

5.151 *Additional allocation:* frequencies in the bands 13 570-13 600 kHz and 13 800-13 870 kHz may be used by stations in the fixed service and in the mobile except aeronautical mobile (R) service, 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. (WRC-07)

5.155B The band 21 870-21 924 kHz is used by the fixed service for provision of services related to aircraft flight safety.

5.156A The use of the band 23 200-23 350 kHz by the fixed service is limited to provision of services related to aircraft flight safety.

5.157 The use of the band 23 350-24 000 kHz by the maritime mobile service is limited to inter-ship radiotelegraphy.

5.180 The frequency 75 MHz is assigned to marker beacons. Administrations shall refrain from assigning frequencies close to the limits of the guardband 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.

5.197A *Additional allocation:* the band 108-117.975 MHz is also allocated on a primary basis to the aeronautical mobile (R) service, limited to systems operating in accordance with recognized international aeronautical standards. Such use shall be in accordance with Resolution **413 (Rev.WRC-07)***. The use of the band 108-112 MHz by the aeronautical mobile (R) service shall be limited to systems composed of ground-based transmitters and associated receivers that provide navigational information in support of air

5.200 In the band 117.975-137 MHz, the frequency 121.5 MHz is the aeronautical emergency frequency and, where required, the frequency 123.1 MHz is the aeronautical frequency auxiliary to 121.5 MHz. Mobile stations of the maritime mobile service may communicate on these frequencies under the conditions laid down in Article **31** for distress and safety purposes with stations of the aeronautical mobile service. (WRC-07)

5.202 *Additional allocation:* in Saudi Arabia, Armenia, Azerbaijan, Belarus, Bulgaria, the United Arab Emirates, the Russian Federation, Georgia, Iran (Islamic Republic of), Jordan, Oman, Uzbekistan, Poland, the Syrian Arab Republic, Kyrgyzstan, Romania, Tajikistan, Turkmenistan and Ukraine, the frequency band 136-137 MHz is also allocated to the aeronautical mobile (OR) service on a primary basis. In assigning frequencies to stations of the aeronautical mobile (OR) service, the administration shall take account of the frequencies assigned to stations in the aeronautical mobile (R) service. (WRC-15)

5.204 *Different category of service:* in Afghanistan, Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, China, Cuba, the United Arab Emirates, India, Indonesia, Iran (Islamic Republic of), Iraq, Kuwait, Montenegro, Oman, Pakistan, the Philippines, Qatar, Serbia, Singapore, Thailand and Yemen, the band 137-138 MHz is allocated to the fixed and mobile, except aeronautical mobile (R), services on a primary basis (see No. 5.33). (WRC-07)

5.208 The use of the band 137-138 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. (WRC-97)

5.208A In making assignments to space stations in the mobile-satellite service in the bands 137-138 MHz, 387-390 MHz and 400.15-401 MHz, administrations shall take all practicable steps to protect the radio astronomy service in the bands 150.05-153 MHz, 322-328.6 MHz, 406.1-410 MHz and 608-614 MHz from harmful interference from unwanted emissions. The threshold levels of interference detrimental to the radio astronomy service are shown in the relevant ITU-R Recommendation. (WRC-07)

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* *Note by the Secretariat:* This Resolution was revised by WRC-12.

5.208B* In the bands:

137-138 MHz,
387-390 MHz,
400.15-401 MHz,
1 452-1 492 MHz,
1 525-1 610 MHz,
1 613.8-1 626.5 MHz,
2 655-2 690 MHz,
21.4-22 GHz,

Resolution **739 (Rev.WRC-15)** applies. (WRC-15)

5.209 The use of the bands 137-138 MHz, 148-150.05 MHz, 399.9-400.05 MHz, 400.15-401 MHz, 454-456 MHz and 459-460 MHz by the mobile-satellite service is limited to non-geostationary-satellite systems. (WRC-97)

5.211 *Additional allocation:* in Germany, Saudi Arabia, Austria, Bahrain, Belgium, Denmark, the United Arab Emirates, Spain, Finland, Greece, Guinea, Ireland, Israel, Kenya, Kuwait, The Former Yugoslav Republic of Macedonia, Lebanon, Liechtenstein, Luxembourg, Mali, Malta, Montenegro, Norway, the Netherlands, Qatar, Slovakia, the United Kingdom, Serbia, Slovenia, Somalia, Sweden, Switzerland, Tanzania, Tunisia and Turkey, the frequency band 138-144 MHz is also allocated to the maritime mobile and land mobile services on a primary basis. (WRC-15)

5.218 *Additional allocation:* the band 148-149.9 MHz is also allocated to the space operation service (Earth-to-space) on a primary basis, subject to agreement obtained under No. **9.21**. The bandwidth of any individual transmission shall not exceed ± 25 kHz.

5.219 The use of the band 148-149.9 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. The mobile-satellite service shall not constrain the development and use of the fixed, mobile and space operation services in the band 148-149.9 MHz.

5.220 The use of the bands 149.9-150.05 MHz and 399.9-400.05 MHz by the mobile-satellite service is subject to coordination under No. 9.11A. (WRC-15)

5.221 Stations of the mobile-satellite service in the frequency band 148-149.9 MHz shall not cause harmful interference to, or claim protection from, stations of the fixed or mobile services operating in accordance with the Table of Frequency Allocations in the following countries: Albania, Algeria, Germany, Saudi Arabia, Australia, Austria, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Benin, Bosnia and Herzegovina, Botswana, Brunei Darussalam, Bulgaria, Cameroon, China, Cyprus, Congo (Rep. of the), Korea (Rep. of), Côte d'Ivoire, Croatia, Cuba, Denmark, Djibouti, Egypt, the United Arab Emirates, Eritrea, Spain, Estonia, Ethiopia, the Russian Federation, Finland, France, Gabon, Georgia, Ghana, Greece, Guinea, Guinea Bissau, Hungary, India, Iran (Islamic Republic of), Ireland, Iceland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kuwait, The Former Yugoslav Republic of Macedonia, Lesotho, Latvia, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg, Malaysia, Mali, Malta, Mauritania, Moldova, Mongolia, Montenegro, Mozambique, Namibia, Norway, New Zealand, Oman, Uganda, Uzbekistan, Pakistan, Panama, Papua New Guinea, Paraguay, the Netherlands, the Philippines, Poland, Portugal, Qatar, the Syrian Arab Republic, Kyrgyzstan, Dem. People's Rep. of Korea, Slovakia, Romania, the United Kingdom, Senegal, Serbia, Sierra Leone, Singapore, Slovenia, Sudan, Sri Lanka, South Africa, Sweden, Switzerland, Swaziland, Tanzania, Chad, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Viet Nam, Yemen, Zambia and Zimbabwe. (WRC-15)

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* This provision was previously numbered as No. **5.347A**. It was renumbered to preserve the sequential order.

5.226 The frequency 156.525 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service using digital selective calling (DSC). The conditions for the use of this frequency and the band 156.4875-156.5625 MHz are contained in Articles **31** and **52**, and in Appendix **18**.

The frequency 156.8 MHz is the international distress, safety and calling frequency for the maritime mobile VHF radiotelephone service. The conditions for the use of this frequency and the band 156.7625-156.8375 MHz are contained in Article **31** and Appendix **18**.

In the bands 156-156.4875 MHz, 156.5625-156.7625 MHz, 156.8375-157.45 MHz, 160.6-160.975 MHz and 161.475-162.05 MHz, each administration shall give priority to the maritime mobile service on only such frequencies as are assigned to stations of the maritime mobile service by the administration (see Articles **31** and **52**, and Appendix **18**).

Any use of frequencies in these bands by stations of other services to which they are allocated should be avoided in areas where such use might cause harmful interference to the maritime mobile VHF radiocommunication service.

However, the frequencies 156.8 MHz and 156.525 MHz and the frequency bands in which priority is given to the maritime mobile service may be used for radiocommunications on inland waterways subject to agreement between interested and affected administrations and taking into account current frequency usage and existing agreements. (WRC-07)

5.227 *Additional allocation:* the bands 156.4875-156.5125 MHz and 156.5375-156.5625 MHz are also allocated to the fixed and land mobile services on a primary basis. The use of these bands by the fixed and land mobile services shall not cause harmful interference to nor claim protection from the maritime mobile VHF radiocommunication service. (WRC-07)

5.228 The use of the frequency bands 156.7625-156.7875 MHz and 156.8125-156.8375 MHz by the mobile-satellite service (Earth-to-space) is limited to the reception of automatic identification system (AIS) emissions of long-range AIS broadcast messages (Message 27, see the most recent version of Recommendation ITU-R M.1371). With the exception of AIS emissions, emissions in these frequency bands by systems operating in the maritime mobile service for communications shall not exceed 1 W. (WRC-12)

5.228A The frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz may be used by aircraft stations for the purpose of search and rescue operations and other safety-related communications. (WRC-12)

5.228B The use of the frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the fixed and land mobile services shall not cause harmful interference to, or claim protection from, the maritime mobile service. (WRC-12)

5.228F The use of the frequency bands 161.9625-161.9875 MHz and 162.0125-162.0375 MHz by the mobile-satellite service (Earth-to-space) is limited to the reception of automatic identification system emissions from stations operating in the maritime mobile service. (WRC-12)

5.228AA The use of the frequency bands 161.9375-161.9625 MHz and 161.9875-162.0125 MHz by the maritime mobile-satellite (Earth-to-space) service is limited to the systems which operate in accordance with Appendix **18**. (WRC-15)

5.247 *Additional allocation:* in Saudi Arabia, Bahrain, the United Arab Emirates, Jordan, Oman, Qatar and Syrian Arab Republic, the band 223-235 MHz is also allocated to the aeronautical radionavigation service on a primary basis.

5.254 The bands 235-322 MHz and 335.4-399.9 MHz may be used by the mobile-satellite service, subject to agreement obtained under No. **9.21**, on condition that stations in this service do not cause harmful interference to those of other services operating or planned to be operated in accordance with the Table of Frequency Allocations except for the additional allocation made in footnote No. **5.256A**. (WRC-03)

5.255 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 coordination under No. **9.11A**.

5.256 The frequency 243 MHz is the frequency in this band for use by survival craft stations and equipment used for survival purposes. (WRC-07)

5.257 The band 267-272 MHz may be used by administrations for space telemetry in their countries on a primary basis, subject to agreement obtained under No. **9.21**.

5.258 The use of the band 328.6-335.4 MHz by the aeronautical radionavigation service is limited to Instrument Landing Systems (glide path).

5.261 Emissions shall be confined in a band of ± 25 kHz about the standard frequency 400.1 MHz.

5.262 *Additional allocation:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Botswana, Colombia, Cuba, Egypt, the United Arab Emirates, Ecuador, the Russian Federation, Georgia, Hungary, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kazakhstan, Kuwait, Liberia, Malaysia, Moldova, Oman, Uzbekistan, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, Kyrgyzstan, Singapore, Somalia, Tajikistan, Chad, Turkmenistan and Ukraine, the band 400.05-401 MHz is also allocated to the fixed and mobile services on a primary basis. (WRC-12)

5.263 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.

5.264 The use of the band 400.15-401 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. The power flux-density limit indicated in Annex 1 of Appendix **5** shall apply until such time as a competent world radiocommunication conference revises it.

5.265 In the frequency band 403-410 MHz, Resolution **205 (Rev.WRC-15)** applies. (WRC-15)

5.266 The use of the band 406-406.1 MHz by the mobile-satellite service is limited to low power satellite emergency position-indicating radiobeacons (see also Article **31**). (WRC-07)

5.267 Any emission capable of causing harmful interference to the authorized uses of the band 406-406.1 MHz is prohibited.

5.268 Use of the band 410-420 MHz by the space research service is limited to space-to-space communication links with an orbiting, manned space vehicle. The power flux-density at the surface of the Earth produced by emissions from transmitting stations of the space research service (space-to-space) in the frequency band 410-420 MHz shall not exceed –153 dB(W/m^2) for $0° \le \delta \le 5°$, $-153 ° 0.077 (\delta - 5)$ dB(W/m^2) for $5° \le \delta \le 70°$ and –148 dB(W/m^2) for $70° \le \delta \le 90°$, where δ is the angle of arrival of the radio-frequency wave and the reference bandwidth is 4 kHz. In this frequency band, stations of the space research service (space-tospace) shall not claim protection from, nor constrain the use and development of, stations of fixed and mobile services. No. **4.10** does not apply. (WRC-15)

5.276 *Additional allocation:* in Afghanistan, Algeria, Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Burkina Faso, Djibouti, Egypt, the United Arab Emirates, Ecuador, Eritrea, Ethiopia, Greece, Guinea, India, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Italy, Jordan, Kenya, Kuwait, Libya, Malaysia, Niger, Nigeria, Oman, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, the Dem. People's Rep. of Korea, Singapore, Somalia, Sudan, Switzerland, Thailand, Togo, Turkey and Yemen, the frequency band 430-440 MHz is also allocated to the fixed service on a primary basis and the frequency bands 430-435 MHz and 438-440 MHz are also allocated, except in Ecuador, to the mobile, except aeronautical mobile, service on a primary basis. (WRC-15)

5.279A The use of the frequency band 432-438 MHz by sensors in the Earth explorationsatellite service (active) shall be in accordance with Recommendation ITU-R RS.1260-1. Additionally, the Earth exploration-satellite service (active) in the frequency band 432-438 MHz shall not cause harmful interference to the aeronautical radionavigation service in China. The provisions of this footnote in no way diminish the obligation of the Earth exploration-satellite service (active) to operate as a secondary service in accordance with Nos. **5.29** and **5.30**. (WRC-15)

5.282 In the bands 435-438 MHz, 1 260-1 270 MHz, 2 400-2 450 MHz, 3 400-3 410 MHz (in Regions 2 and 3 only) and 5 650-5 670 MHz, the amateur-satellite service may operate subject to not causing harmful interference to other services operating in accordance with the Table (see No. **5.43**). Administrations authorizing such use shall ensure that any harmful interference caused by emissions from a station in the amateur-satellite service is immediately eliminated in accordance with the provisions of No. **25.11**. The use of the bands 1 260-1 270 MHz and 5 650-5 670 MHz by the amateur-satellite service is limited to the Earth-to-space direction.

5.286 The band 449.75-450.25 MHz may be used for the space operation service (Earth-to-space) and the space research service (Earth-to-space), subject to agreement obtained under No. **9.21**.

5.286A The use of the bands 454-456 MHz and 459-460 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. (WRC-97)

5.286AA The band 450-470 MHz is identified for use by administrations wishing to implement International MobileTelecommunications (IMT). See Resolution **224 (Rev.WRC-15)**. This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. (WRC-15)

5.287 Use of the frequency bands 457.5125-457.5875 MHz and 467.5125-467.5875 MHz by the maritime mobile service is limited to on-board communication stations. The characteristics of the equipment and the channelling arrangement shall be in accordance with Recommendation ITU-R M.1174-3. The use of these frequency bands in territorial waters is subject to the national regulations of the administration concerned. (WRC-15)

5.289 Earth exploration-satellite service applications, other than the meteorological-satellite service, may also be used in the bands 460-470 MHz and 1 690-1 710 MHz for space-to-Earth transmissions subject to not causing harmful interference to stations operating in accordance with the Table.

5.294 *Additional allocation:* in Saudi Arabia, Cameroon, Côte d'Ivoire, Egypt, Ethiopia, Israel, Libya, the Syrian Arab Republic, Chad and Yemen, the band 470-582 MHz is also allocated to the fixed service on a secondary basis. (WRC-12)

5.296 *Additional allocation:* in Albania, Germany, Angola, Saudi Arabia, Austria, Bahrain, Belgium, Benin, Bosnia and Herzegovina, Botswana, Bulgaria, Burkina Faso, Burundi, Cameroon, Vatican, Congo (Rep. of the), Côte d'Ivoire, Croatia, Denmark, Djibouti, Egypt, United Arab Emirates, Spain, Estonia, Finland, France, Gabon, Georgia, Ghana, Hungary, Iraq, Ireland, Iceland, Israel, Italy, Jordan, Kenya, Kuwait, Lesotho, Latvia, The Former Yugoslav Republic of Macedonia, Lebanon, Libya, Liechtenstein, Lithuania, Luxembourg, Malawi, Mali, Malta, Morocco, Mauritius, Mauritania, Moldova, Monaco, Mozambique, Namibia, Niger, Nigeria, Norway, Oman, Uganda, the Netherlands, Poland, Portugal, Qatar, the Syrian Arab Republic, Slovakia, the Czech Republic, the United Kingdom, Rwanda, San Marino, Serbia, Sudan, South Africa, Sweden, Switzerland, Swaziland, Tanzania, Chad, Togo, Tunisia, Turkey, Ukraine, Zambia and Zimbabwe, the frequency band 470-694 MHz is also allocated on a secondary basis to the land mobile service, intended for applications ancillary to broadcasting and programme-making. Stations of the land mobile service in the countries listed in this footnote shall not cause harmful interference to existing or planned stations operating in accordance with the Table in countries other than those listed in this footnote. (WRC-15)

5.300 *Additional allocation:* in Saudi Arabia, Cameroon, Egypt, United Arab Emirates, Israel, Jordan, Libya, Oman, Qatar, the Syrian Arab Republic, and Sudan, the band 582-790 MHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a secondary basis. (WRC-15)

5.311A For the frequency band 620-790 MHz, see also Resolution **549 (WRC-07)**. (WRC-07)

5.312A In Region 1, the use of the band 694-790 MHz by the mobile, except aeronautical mobile, service is subject to the provisions of Resolution **760 (WRC-15)**. See also Resolution **224 (Rev.WRC-15)**. (WRC-15)

5.316B In Region 1, the allocation to the mobile, except aeronautical mobile, service in the frequency band 790-862 MHz is subject to agreement obtained under No. **9.21** with respect to the aeronautical radionavigation service in countries mentioned in No. **5.312**. For countries party to the GE06 Agreement, the use of stations

of the mobile service is also subject to the successful application of the procedures of that Agreement. Resolutions **224 (Rev.WRC-15)** and **749 (Rev.WRC-15)** shall apply, as appropriate. (WRC-15)

5.317A The parts of the frequency band 698-960 MHz in Region 2 and the frequency bands 694-790 MHz in Region 1 and 790-960 MHz in Regions 1 and 3 which are allocated to the mobile service on a primary basis are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) – see Resolutions **224 (Rev.WRC-15)**, **760 (WRC-15)** and **749 (Rev.WRC-15)**, where applicable. This identification does not preclude the use of these frequency bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC−15)

5.327A The use of the frequency band 960-1 164 MHz by the aeronautical mobile (R) service is limited to systems that operate in accordance with recognized international aeronautical standards. Such use shall be in accordance with Resolution **417 (Rev.WRC-15)**. (WRC-15)

5.328 The use of the band 960-1 215 MHz by the aeronautical radionavigation service is reserved on a worldwide basis for the operation and development of airborne electronic aids to air navigation and any directly associated ground-based facilities. (WRC-2000)

5.328A Stations in the radionavigation-satellite service in the band 1 164-1 215 MHz shall operate in accordance with the provisions of Resolution **609 (Rev.WRC-07)** and shall not claim protection from stations in the aeronautical radionavigation service in the band 960-1 215 MHz. No. **5.43A** does not apply. The provisions of No. **21.18** shall apply. (WRC-07)

5.328AA The frequency band 1 087.7-1 092.3 MHz is also allocated to the aeronautical mobilesatellite (R) service (Earth-to-space) on a primary basis, limited to the space station reception of Automatic Dependent Surveillance-Broadcast (ADS-B) emissions from aircraft transmitters that operate in accordance with recognized international aeronautical standards. Stations operating in the aeronautical mobile-satellite (R) service shall not claim protection from stations operating in the aeronautical radionavigation service. Resolution **425 (WRC-15)** shall apply. (WRC-15)

5.328B The use of the bands 1 164-1 300 MHz, 1 559-1 610 MHz and 5 010-5 030 MHz by systems and networks in the radionavigation-satellite service for which complete coordination or notification information, as appropriate, is received by the Radiocommunication Bureau after 1 January 2005 is subject to the application of the provisions of Nos. **9.12**, **9.12A** and **9.13**. Resolution **610 (WRC-03)** shall also apply; however, in the case of radionavigation-satellite service (space-to-space) networks and systems, Resolution **610 (WRC-03)** shall only apply to transmitting space stations. In accordance with No. **5.329A**, for systems and networks in the radionavigation-satellite service (space-to-space) in the bands 1 215-1 300 MHz and 1 559-1 610 MHz, the provisions of Nos. **9.7**, **9.12**, **9.12A** and **9.13** shall only apply with respect to other systems and networks in the radionavigation-satellite service (space-to-space). (WRC-07)

5.329 Use of the radionavigation-satellite service in the band 1 215-1 300 MHz shall be subject to the condition that no harmful interference is caused to, and no protection is claimed from, the radionavigation service authorized under No. **5.331**. Furthermore, the use of the radionavigation-satellite service in the band 1 215-1 300 MHz shall be subject to the condition that no harmful interference is caused to the radiolocation service. No. **5.43** shall not apply in respect of the radiolocation service. Resolution **608 (WRC-03)** shall apply. (WRC-03)

5.329A Use of systems in the radionavigation-satellite service (space-to-space) operating in the bands 1 215-1 300 MHz and 1 559-1 610 MHz is not intended to provide safety service applications, and shall not impose any additional constraints on radionavigation-satellite service (space-to-Earth) systems or on other services operating in accordance with the Table of Frequency Allocations. (WRC-07)

5.330 *Additional allocation:* in Angola, Saudi Arabia, Bahrain, Bangladesh, Cameroon, China, Djibouti, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Guyana, India, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Japan, Jordan, Kuwait, Nepal, Oman, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, Somalia, Sudan, South Sudan, Chad, Togo and Yemen, the band 1 215-1 300 MHz is also allocated to the fixed and mobile services on a primary basis. (WRC-12)

5.331 *Additional allocation:* in Algeria, Germany, Saudi Arabia, Australia, Austria, Bahrain, Belarus, Belgium, Benin, Bosnia and Herzegovina, Brazil, Burkina Faso, Burundi, Cameroon, China, Korea (Rep. of), Croatia, Denmark, Egypt, the United Arab Emirates, Estonia, the Russian Federation, Finland, France, Ghana, Greece,

Guinea, Equatorial Guinea, Hungary, India, Indonesia, Iran (Islamic Republic of), Iraq, Ireland, Israel, Jordan, Kenya, Kuwait, The Former Yugoslav Republic of Macedonia, Lesotho, Latvia, Lebanon, Liechtenstein, Lithuania, Luxembourg, Madagascar, Mali, Mauritania, Montenegro, Nigeria, Norway, Oman, Pakistan, the Netherlands, Poland, Portugal, Qatar, the Syrian Arab Republic, Dem. People's Rep. of Korea, Slovakia, the United Kingdom, Serbia, Slovenia, Somalia, Sudan, South Sudan, Sri Lanka, South Africa, Sweden, Switzerland, Thailand, Togo, Turkey, Venezuela and Viet Nam, the band 1 215-1 300 MHz is also allocated to the radionavigation service on a primary basis. In Canada and the United States, the band 1 240-1 300 MHz is also allocated to the radionavigation service, and use of the radionavigation service shall be limited to the aeronautical radionavigation service. (WRC-12)

5.332 In the band 1 215-1 260 MHz, active spaceborne sensors in the Earth exploration-satellite and space research services shall not cause harmful interference to, claim protection from, or otherwise impose constraints on operation or development of the radiolocation service, the radionavigation-satellite service and other services allocated on a primary basis. (WRC-2000)

5.335A In the band 1 260-1 300 MHz, active spaceborne sensors in the Earth exploration-satellite and space research services shall not cause harmful interference to, claim protection from, or otherwise impose constraints on operation or development of the radiolocation service and other services allocated by footnotes on a primary basis. (WRC-2000)

5.337 The use of the bands 1 300-1 350 MHz, 2 700-2 900 MHz and 9 000-9 200 MHz by the aeronautical radionavigation service is restricted to ground-based radars and to associated airborne transponders which transmit only on frequencies in these bands and only when actuated by radars operating in the same band.

5.337A The use of the band 1 300-1 350 MHz by earth stations in the radionavigation-satellite service and by stations in the radiolocation service shall not cause harmful interference to, nor constrain the operation and development of, the aeronautical-radionavigation service. (WRC-2000)

5.341A In Region 1, the frequency bands 1 427-1 452 MHz and 1 492-1 518 MHz are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution **223 (Rev.WRC-15)**. This identification does not preclude the use of these frequency bands by any other application of the services to which it is allocated and does not establish priority in the Radio Regulations. The use of IMT stations is subject to agreement obtained under No. **9.21** with respect to the aeronautical mobile service used for aeronautical telemetry in accordance with No. **5.342**. (WRC-15)

5.338A In the frequency bands 1 350-1 400 MHz, 1 427-1 452 MHz, 22.55-23.55 GHz, 30-31.3 GHz, 49.7-50.2 GHz, 50.4-50.9 GHz, 51.4-52.6 GHz, 81-86 GHz and 92-94 GHz, Resolution **750 (Rev.WRC-15)** applies. (WRC-15)

5.339 The bands 1 370-1 400 MHz, 2 640-2 655 MHz, 4 950-4 990 MHz and 15.20-15.35 GHz are also allocated to the space research (passive) and Earth exploration-satellite (passive) services on a secondary basis.

5.340 All emissions are prohibited in the following bands:

1 400-1 427 MHz,	
2 690-2 700 MHz,	except those provided for by No. **5.422**,
10.68-10.7 GHz,	except those provided for by No. **5.483**,
15.35-15.4 GHz,	except those provided for by No. **5.511**,
23.6-24 GHz,	
31.3-31.5 GHz,	
31.5-31.8 GHz,	in Region 2,
48.94-49.04 GHz,	from airborne stations

50.2-50.4 GHz[1],
52.6-54.25 GHz,
86-92 GHz,
100-102 GHz,
109.5-111.8 GHz,
114.25-116 GHz,
148.5-151.5 GHz,
164-167 GHz,
182-185 GHz,
190-191.8 GHz,
200-209 GHz,
226-231.5 GHz,
250-252 GHz. (WRC-03)

5.341 In the bands 1 400-1 727 MHz, 101-120 GHz and 197-220 GHz, passive research is being conducted by some countries in a programme for the search for intentional emissions of extraterrestrial origin.

5.345 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)***.

5.346 In Algeria, Angola, Saudi Arabia, Bahrain, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Congo (Rep. of the), Côte d'Ivoire, Djibouti, Egypt, United Arab Emirates, Gabon, Gambia, Ghana, Guinea, Iraq, Jordan, Kenya, Kuwait, Lesotho, Lebanon, Liberia, Madagascar, Malawi, Mali, Morocco, Mauritius, Mauritania, Mozambique, Namibia, Niger, Nigeria, Oman, Uganda, Palestine, Qatar, Dem. Rep. of the Congo, Rwanda, Senegal, Seychelles, Sudan, South Sudan, South Africa, Swaziland, Tanzania, Chad, Togo, Tunisia, Zambia, and Zimbabwe, the frequency band 1 452-1 492 MHz is identified for use by administrations listed above wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution **223 (Rev.WRC-15)**. This identification does not preclude the use of this frequency band by any other application of the services to which it is allocated and does not establish priority in the Radio Regulations. The use of this frequency band for the implementation of IMT is subject to agreement obtained under No. **9.21** with respect to the aeronautical mobile service used for aeronautical telemetry in accordance with No. **5.342**. See also Resolution **761 (WRC-15)**. (WRC-15)

5.348 The use of the band 1 518-1 525 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. In the band 1 518-1 525 MHz stations in the mobile-satellite service shall not claim protection from the stations in the fixed service. No. **5.43A** does not apply. (WRC-03)

5.348A In the band 1 518-1 525 MHz, the coordination threshold in terms of the power flux-density levels at the surface of the Earth in application of No. **9.11A** for space stations in the mobile-satellite (space-to-Earth) service, with respect to the land mobile service use for specialized mobile radios or used in conjunction with public switched telecommunication networks (PSTN) operating within the territory of Japan, shall be –150 dB(W/m^2) in any 4 kHz band for all angles of arrival, instead of those given in Table 5-2 of Appendix **5**. In the band 1 518-1 525 MHz stations in the mobile-satellite service shall not claim protection from stations in the mobile service in the territory of Japan. No. **5.43A** does not apply. (WRC-03)

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[1] **5.340.1** The allocation to the Earth exploration-satellite service (passive) and the space research service (passive) in the band 50.2-50.4 GHz should not impose undue constraints on the use of the adjacent bands by the primary allocated services in those bands. (WRC-97)

* *Note by the Secretariat:* This Resolution was revised by WRC-03.

5.348B In the band 1 518-1 525 MHz, stations in the mobile-satellite service shall not claim protection from aeronautical mobile telemetry stations in the mobile service in the territory of the United States (see Nos. **5.343** and **5.344**) and in the countries listed in No. **5.342**. No. **5.43A** does not apply. (WRC-03)

5.349 *Different category of service:* in Saudi Arabia, Azerbaijan, Bahrain, Cameroon, Egypt, France, Iran (Islamic Republic of), Iraq, Israel, Kazakhstan, Kuwait, The Former Yugoslav Republic of Macedonia, Lebanon, Morocco, Qatar, Syrian Arab Republic, Kyrgyzstan, Turkmenistan and Yemen, the allocation of the band 1 525-1 530 MHz to the mobile, except aeronautical mobile, service is on a primary basis (see No. **5.33**). (WRC-07)

5.351 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.

5.351A For the use of the bands 1 518-1 544 MHz, 1 545-1 559 MHz, 1 610-1 645.5 MHz, 1 646.5-1 660.5 MHz, 1 668-1 675 MHz, 1 980-2 010 MHz, 2 170-2 200 MHz, 2 483.5-2 520 MHz and 2 670-2 690 MHz by the mobile-satellite service, see Resolutions **212 (Rev.WRC-07)** and **225 (Rev.WRC-07)***. (WRC-07)

5.352A In the frequency band 1 525-1 530 MHz, stations in the mobile-satellite service, except stations in the maritime mobile-satellite service, shall not cause harmful interference to, or claim protection from, stations of the fixed service in Algeria, Saudi Arabia, Egypt, France and French overseas communities of Region 3, Guinea, India, Israel, Italy, Jordan, Kuwait, Mali, Morocco, Mauritania, Nigeria, Oman, Pakistan, the Philippines, Qatar, Syrian Arab Republic, Viet Nam and Yemen notified prior to 1 April 1998. (WRC-15)

5.353A In applying the procedures of Section II of Article **9** to the mobile-satellite service in the bands 1 530-1 544 MHz and 1 626.5-1 645.5 MHz, priority shall be given to accommodating the spectrum requirements for distress, urgency and safety communications of the Global Maritime Distress and Safety System (GMDSS). Maritime mobile-satellite distress, urgency and safety communications shall have priority access and immediate availability over all other mobile satellite communications operating within a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, distress, urgency and safety communications of the GMDSS. Account shall be taken of the priority of safety-related communications in the other mobile-satellite services. (The provisions of Resolution **222 (WRC-2000)*** shall apply.) (WRC-2000)

5.354 The use of the bands 1 525-1 559 MHz and 1 626.5-1 660.5 MHz by the mobile-satellite services is subject to coordination under No. **9.11A**.

5.355 *Additional allocation:* in Bahrain, Bangladesh, Congo (Rep. of the), Djibouti, Egypt, Eritrea, Iraq, Israel, Kuwait, Qatar, Syrian Arab Republic, Somalia, Sudan, South Sudan, Chad, Togo and Yemen, the bands 1 540-1 559 MHz, 1 610-1 645.5 MHz and 1 646.5-1 660 MHz are also allocated to the fixed service on a secondary basis. (WRC-12)

5.356 The use of the band 1 544-1 545 MHz by the mobile-satellite service (space-to-Earth) is limited to distress and safety communications (see Article **31**).

5.357A In applying the procedures of Section II of Article **9** to the mobile-satellite service in the frequency bands 1 545-1 555 MHz and 1 646.5-1 656.5 MHz, priority shall be given to accommodating the spectrum requirements of the aeronautical mobile-satellite (R) service providing transmission of messages with priority 1 to 6 in Article **44**. Aeronautical mobile-satellite (R) service communications with priority 1 to 6 in Article **44** shall have priority access and immediate availability, by pre-emption if necessary, over all other mobile-satellite communications operating within a network. Mobile-satellite systems shall not cause unacceptable interference to, or claim protection from, aeronautical mobile-satellite (R) service communications with priority 1 to 6 in Article **44**. Account shall be taken of the priority of safety-related

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* *Note by the Secretariat:* This Resolution was revised by WRC-12.

* *Note by the Secretariat:* This Resolution was revised by WRC-07 and WRC-12.

communications in the other mobile-satellite services. (The provisions of Resolution **222 (Rev.WRC-12)** shall apply.) (WRC-12)

5.359 *Additional allocation:* in Germany, Saudi Arabia, Armenia, Azerbaijan, Belarus, Benin, Cameroon, the Russian Federation, France, Georgia, Guinea, Guinea-Bissau, Jordan, Kazakhstan, Kuwait, Lithuania, Mauritania, Uganda, Uzbekistan, Pakistan, Poland, the Syrian Arab Republic, Kyrgyzstan, the Dem. People's Rep. of Korea, Romania, Tajikistan, Tunisia, Turkmenistan and Ukraine, the frequency bands 1 550-1 559 MHz, 1 610-1 645.5 MHz and 1 646.5-1 660 MHz are also allocated to the fixed service on a primary basis. Administrations are urged to make all practicable efforts to avoid the implementation of new fixed-service stations in these frequency bands. (WRC-15)

5.364 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 coordination under No. **9.11A**. A mobile earth station operating in either of the services in this band shall not produce a peak e.i.r.p. density in excess of -15 dB(W/4 kHz) in the part of the band used by systems operating in accordance with the provisions of No. **5.366** (to which No. **4.10** applies), unless otherwise agreed by the affected administrations. In the part of the band where such systems are not operating, the mean e.i.r.p. density of a mobile earth station shall not exceed –3 dB(W/4 kHz). Stations of the mobile-satellite service shall not claim protection from stations in the aeronautical radionavigation service, stations operating in accordance with the provisions of No. **5.366** and stations in the fixed service operating in accordance with the provisions of No. **5.359**. Administrations responsible for the coordination of mobile-satellite networks shall make all practicable efforts to ensure protection of stations operating in accordance with the provisions of No. **5.366**.

5.365 The use of the band 1 613.8-1 626.5 MHz by the mobile-satellite service (space-to-Earth) is subject to coordination under No. **9.11A**.

5.366 The band 1 610-1 626.5 MHz is reserved on a worldwide basis for the use and development of airborne electronic aids to air navigation and any directly associated ground-based or satellite-borne facilities. Such satellite use is subject to agreement obtained under No. **9.21**.

5.367 *Additional allocation*: The frequency band 1 610-1 626.5 MHz is also allocated to the aeronautical mobile-satellite (R) service on a primary basis, subject to agreement obtained under No. **9.21**. (WRC-12)

5.368 With respect to the radiodetermination-satellite and mobile-satellite services the provisions of No. **4.10** do not apply in the band 1 610-1 626.5 MHz, with the exception of the aeronautical radionavigation-satellite service.

5.371 *Additional allocation:* in Region 1, the band 1 610-1 626.5 MHz (Earth-to-space) is also allocated to the radiodetermination-satellite service on a secondary basis, subject to agreement obtained under No. **9.21**. (WRC-12)

5.372 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. **29.13** applies).

5.374 Mobile earth stations in the mobile-satellite service operating in the bands 1 631.5-1 634.5 MHz and 1 656.5-1 660 MHz shall not cause harmful interference to stations in the fixed service operating in the countries listed in No. **5.359**. (WRC-97)

5.375 The use of the band 1 645.5-1 646.5 MHz by the mobile-satellite service (Earth-to-space) and for inter-satellite links is limited to distress and safety communications (see Article **31**).

5.376 Transmissions in the band 1 646.5-1 656.5 MHz from aircraft stations in the aeronautical mobile (R) service directly to terrestrial aeronautical stations, or between aircraft stations, are also authorized when such transmissions are used to extend or supplement the aircraft-to-satellite links.

5.376A Mobile earth stations operating in the band 1 660-1 660.5 MHz shall not cause harmful interference to stations in the radio astronomy service. (WRC-97)

5.379A Administrations are urged to give all practicable protection in the band 1 660.5-1 668.4 MHz for future research in radio astronomy, particularly by eliminating air-to-ground transmissions in the meteorological aids service in the band 1 664.4-1 668.4 MHz as soon as practicable.

5.379B The use of the band 1 668-1 675 MHz by the mobile-satellite service is subject to coordination under No. **9.11A**. In the band 1 668-1 668.4 MHz, Resolution **904 (WRC-07)** shall apply. (WRC-07)

5.379C In order to protect the radio astronomy service in the band 1 668-1 670 MHz, the aggregate power flux-density values produced by mobile earth stations in a network of the mobile-satellite service operating in this band shall not exceed –181 dB(W/m^2) in 10 MHz and –194 dB(W/m^2) in any 20 kHz at any radio astronomy station recorded in the Master International Frequency Register, for more than 2% of integration periods of 2 000 s. (WRC-03)

5.379D For sharing of the band 1 668.4-1 675 MHz between the mobile-satellite service and the fixed and mobile services, Resolution **744 (Rev.WRC-07)** shall apply. (WRC-07)

5.379E In the band 1 668.4-1 675 MHz, stations in the mobile-satellite service shall not cause harmful interference to stations in the meteorological aids service in China, Iran (Islamic Republic of), Japan and Uzbekistan. In the band 1 668.4-1 675 MHz, administrations are urged not to implement new systems in the meteorological aids service and are encouraged to migrate existing meteorological aids service operations to other bands as soon as practicable. (WRC-03)

5.380A In the band 1 670-1 675 MHz, stations in the mobile-satellite service shall not cause harmful interference to, nor constrain the development of, existing earth stations in the meteorological-satellite service notified before 1 January 2004. Any new assignment to these earth stations in this band shall also be protected from harmful interference from stations in the mobile-satellite service. (WRC-07)

5.382 *Different category of service:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Congo (Rep. of the), Egypt, the United Arab Emirates, Eritrea, Ethiopia, the Russian Federation, Guinea, Iraq, Israel, Jordan, Kazakhstan, Kuwait, the Former Yugoslav Republic of Macedonia, Lebanon, Mauritania, Moldova, Mongolia, Oman, Uzbekistan, Poland, Qatar, the Syrian Arab Republic, Kyrgyzstan, Somalia, Tajikistan, Turkmenistan, Ukraine and Yemen, the allocation of the frequency band 1 690-1 700 MHz to the fixed and mobile, except aeronautical mobile, services is on a primary basis (see No. **5.33**), and in the Dem. People's Rep. of Korea, the allocation of the frequency band 1 690-1 700 MHz to the fixed service is on a primary basis (see No. 5.33) and to the mobile, except aeronautical mobile, service on a secondary basis. (WRC-15)

5.384A The frequency bands 1 710-1 885 MHz, 2 300-2 400 MHz or 2 500-2 690 MHz, and portions thereof, are identified for use by administrations wishing to implement International Mobile Telecommunications (IMT) in accordance with Resolution **223 (Rev.WRC-15)**. This identification does not preclude the use of these frequency bands by any application of the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-15)

5.385 *Additional allocation:* the band 1 718.8-1 722.2 MHz is also allocated to the radio astronomy service on a secondary basis for spectral line observations. (WRC-2000)

5.388 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 International Mobile Telecommunications (IMT). Such use does not preclude the use of these frequency bands by other services to which they are allocated. The frequency bands should be made available for IMT in accordance with Resolution **212 (Rev.WRC-15)** (see also Resolution **223 (Rev.WRC-15)**). (WRC-15)

5.388A In Regions 1 and 3, the bands 1 885-1 980 MHz, 2 010-2 025 MHz and 2 110-2 170 MHz and, in Region 2, the bands 1 885-1 980 MHz and 2 110-2 160 MHz may be used by high altitude platform stations as base stations to provide International Mobile Telecommunications (IMT), in accordance with Resolution **221 (Rev.WRC-07)**. Their use by IMT applications using high altitude platform stations as base stations does not preclude the use of these bands by any station in the services to which they are allocated and does not establish priority in the Radio Regulations. (WRC-12)

5.388B In Algeria, Saudi Arabia, Bahrain, Benin, Burkina Faso, Cameroon, Comoros, Côte d'Ivoire, China, Cuba, Djibouti, Egypt, United Arab Emirates, Eritrea, Ethiopia, Gabon, Ghana, India, Iran (Islamic Republic of), Israel, Jordan, Kenya, Kuwait, Libya, Mali, Morocco, Mauritania, Nigeria, Oman, Uganda, Pakistan, Qatar, the Syrian Arab Republic, Senegal, Singapore, Sudan, South Sudan, Tanzania, Chad, Togo, Tunisia, Yemen, Zambia and Zimbabwe, for the purpose of protecting fixed and mobile services, including IMT mobile stations, in their territories from co-channel interference, a high altitude platform station (HAPS) operating as an IMT base station in neighbouring countries, in the bands referred to in No. **5.388A**, shall not exceed a co-channel power flux-density of −127 dB(W/(m^2 · MHz)) at the Earth's surface outside a country's borders unless explicit agreement of the affected administration is provided at the time of the notification of HAPS. (WRC-12)

5.389A The use of the bands 1 980-2 010 MHz and 2 170-2 200 MHz by the mobile-satellite service is subject to coordination under No. **9.11A** and to the provisions of Resolution **716 (Rev.WRC-2000)***. (WRC-07)

* *Note by the Secretariat:* This Resolution was revised by WRC-12.

5.389E The use of the bands 2 010-2 025 MHz and 2 160-2 170 MHz by the mobile-satellite service in Region 2 shall not cause harmful interference to or constrain the development of the fixed and mobile services in Regions 1 and 3.

5.391 In making assignments to the mobile service in the frequency bands 2 025-2 110 MHz and 2 200-2 290 MHz, administrations shall not introduce high-density mobile systems, as described in Recommendation ITU-R SA.1154-0, and shall take that Recommendation into account for the introduction of any other type of mobile system. (WRC-15)

5.392 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.

5.398 In respect of the radiodetermination-satellite service in the band 2 483.5-2 500 MHz, the provisions of No. **4.10** do not apply.

5.402 The use of the band 2 483.5-2 500 MHz by the mobile-satellite and the radiodetermination-satellite services is subject to the coordination under No. **9.11A**. Administrations are urged to take all practicable steps to prevent harmful interference to the radio astronomy service from emissions in the 2 483.5-2 500 MHz band, especially those caused by second-harmonic radiation that would fall into the 4 990-5 000 MHz band allocated to the radio astronomy service worldwide.

5.410 The band 2 500-2 690 MHz may be used for tropospheric scatter systems in Region 1, subject to agreement obtained under No. **9.21**. No. **9.21** does not apply to tropospheric scatter links situated entirely outside Region 1. Administrations shall make all practicable efforts to avoid developing new tropospheric scatter systems in this band. When planning new tropospheric scatter radio-relay links in this band, all possible measures shall be taken to avoid directing the antennas of these links towards the geostationary-satellite orbit. (WRC-12)

5.413 In the design of systems in the broadcasting-satellite service in the bands between 2 500 MHz and 2 690 MHz, administrations are urged to take all necessary steps to protect the radio astronomy service in the band 2 690-2 700 MHz.

5.416 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, subject to agreement obtained under No. **9.21**. The provisions of No. **9.19** shall be applied by administrations in this band in their bilateral and multilateral negotiations. (WRC-07)

5.418B Use of the band 2 630-2 655 MHz by non-geostationary-satellite systems in the broadcasting-satellite service (sound), pursuant to No. **5.418**, for which complete Appendix 4 coordination information, or notification

information, has been received after 2 June 2000, is subject to the application of the provisions of No. **9.12**. (WRC-03)

5.418C Use of the band 2 630-2 655 MHz by geostationary-satellite networks for which complete Appendix **4** coordination information, or notification information, has been received after 2 June 2000 is subject to the application of the provisions of No. **9.13** with respect to non-geostationary-satellite systems in the broadcasting-satellite service (sound), pursuant to No. **5.418** and No. **22.2** does not apply. (WRC-03)

5.422 *Additional allocation:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, Brunei Darussalam, Congo (Rep. of the), Côte d'Ivoire, Cuba, Djibouti, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Gabon, Georgia, Guinea, Guinea-Bissau, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kuwait, Lebanon, Mauritania, Mongolia, Montenegro, Nigeria, Oman, Pakistan, the Philippines, Qatar, Syrian Arab Republic, Kyrgyzstan, the Dem. Rep. of the Congo, Romania, Somalia, Tajikistan, Tunisia, Turkmenistan, Ukraine and Yemen, the band 2 690-2 700 MHz 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. (WRC-12)

5.423 In the band 2 700-2 900 MHz, ground-based radars used for meteorological purposes are authorized to operate on a basis of equality with stations of the aeronautical radionavigation service.

5.424A In the band 2 900-3 100 MHz, stations in the radiolocation service shall not cause harmful interference to, nor claim protection from, radar systems in the radionavigation service. (WRC-03)

5.425 In the band 2 900-3 100 MHz, the use of the shipborne interrogator-transponder (SIT) system shall be confined to the sub-band 2 930 -2 950 MHz.

5.426 The use of the band 2 900-3 100 MHz by the aeronautical radionavigation service is limited to ground-based radars.

5.427 In the bands 2 900-3 100 MHz and 9 300-9 500 MHz, the response from radar transponders shall not be capable of being confused with the response from radar beacons (racons) and shall not cause interference to ship or aeronautical radars in the radionavigation service, having regard, however, to No. **4.9**.

5.429 *Additional allocation:* in Saudi Arabia, Bahrain, Bangladesh, Benin, Brunei Darussalam, Cambodia, Cameroon, China, Congo (Rep. of the), Korea (Rep. of), Côte d'Ivoire, Egypt, the United Arab Emirates, India, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Japan, Jordan, Kenya, Kuwait, Lebanon, Libya, Malaysia, Oman, Uganda, Pakistan, Qatar, the Syrian Arab Republic, the Dem. Rep. of the Congo, the Dem. People's Rep. of Korea, Sudan and Yemen, the frequency band 3 300-3 400 MHz is also allocated to the fixed and mobile services on a primary basis. The countries bordering the Mediterranean shall not claim protection for their fixed and mobile services from the radiolocation service. (WRC-15)

5.429A *Additional allocation*: in Angola, Benin, Botswana, Burkina Faso, Burundi, Ghana, Guinea, Guinea-Bissau, Lesotho, Liberia, Malawi, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sudan, South Sudan, South Africa, Swaziland, Tanzania, Chad, Togo, Zambia and Zimbabwe, the frequency band 3 300-3 400 MHz is allocated to the mobile, except aeronautical mobile, service on a primary basis. Stations in the mobile service operating in the frequency band 3 300-3 400 MHz shall not cause harmful interference to, or claim protection from, stations operating in the radiolocation service. (WRC-15)

429B In the following countries of Region 1 south of 30° parallel north: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Congo (Rep. of the), Côte d'Ivoire, Egypt, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Malawi, Mauritania, Mozambique, Namibia, Niger, Nigeria, Uganda, the Dem. Rep. of the Congo, Rwanda, Sudan, South Sudan, South Africa, Swaziland, Tanzania, Chad, Togo, Zambia and Zimbabwe, the frequency band 3 300-3 400 MHz is identified for the implementation of International Mobile Telecommunications (IMT). The use of this frequency band shall be in accordance with Resolution **223 (Rev.WRC-15)**. The use of the frequency band 3 300-3 400 MHz by IMT stations in the mobile service shall not cause harmful interference to, or claim protection from, systems in the radiolocation service, and administrations wishing to implement IMT shall obtain the agreement of neighbouring countries to protect operations within the radiolocation service. This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. (WRC-15)

5.430A The allocation of the frequency band 3 400-3 600 MHz to the mobile, except aeronautical mobile, service is subject to agreement obtained under No. **9.21**. This frequency band is identified for International Mobile Telecommunications (IMT). This identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. The provisions of Nos. **9.17** and **9.18** shall also apply in the coordination phase. Before an administration brings into use a (base or mobile) station of the mobile service in this frequency band, it shall ensure that the power flux-density (pfd) produced at 3 m above ground does not exceed −154.5 dB(W/(m² . 4 kHz)) for more than 20% of time at the border of the territory of any other administration. This limit may be exceeded on the territory of any country whose administration has so agreed. In order to ensure that the pfd limit at the border of the territory of any other administration is met, the calculations and verification shall be made, taking into account all relevant information, with the mutual agreement of both administrations (the administration responsible for the terrestrial station and the administration responsible for the earth station) and with the assistance of the Bureau if so requested. In case of disagreement, calculation and verification of the pfd shall be made by the Bureau, taking into account the information referred to above. Stations of the mobile service in the frequency band 3 400-3 600 MHz shall not claim more protection from space stations than that provided in Table **21-4** of the Radio Regulations (Edition of 2004). (WRC-15)

5.436 Use of the frequency band 4 200-4 400 MHz by stations in the aeronautical mobile (R) service is reserved exclusively for wireless avionics intra-communication systems that operate in accordance with recognized international aeronautical standards. Such use shall be in accordance with Resolution **424 (WRC-15)**. (WRC-15)

5.437 Passive sensing in the Earth exploration-satellite and space research services may be authorized in the frequency band 4 200-4 400 MHz on a secondary basis. (WRC-15)

5.438 Use of the frequency band 4 200-4 400 MHz by the aeronautical radionavigation service is reserved exclusively for radio altimeters installed on board aircraft and for the associated transponders on the ground. (WRC-15)

5.440 The standard frequency and time signal-satellite service may be authorized to use the frequency 4 202 MHz for space-to-Earth transmissions and the frequency 6 427 MHz for Earth-to-space transmissions. Such transmissions shall be confined within the limits of ± 2 MHz of these frequencies, subject to agreement obtained under No. **9.21**.

5.441 The use of the bands 4 500-4 800 MHz (space-to-Earth), 6 725-7 025 MHz (Earth-to-space) by the fixed-satellite service shall be in accordance with the provisions of Appendix **30B**. The use of the bands 10.7-10.95 GHz (space-to-Earth), 11.2-11.45 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space) by geostationary-satellite systems in the fixed-satellite service shall be in accordance with the provisions of Appendix **30B**. The use of the bands 10.7-10.95 GHz (space-to-Earth), 11.2-11.45 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space) by a non-geostationary-satellite system in the fixed-satellite service is subject to application of the provisions of No. **9.12** for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. **5.43A** does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-2000)

5.443AA In the frequency bands 5 000-5 030 MHz and 5 091-5 150 MHz, the aeronautical mobile-satellite (R) service is subject to agreement obtained under No. **9.21**. The use of these bands by the aeronautical mobile-satellite (R) service is limited to internationally standardized aeronautical systems. (WRC-12)

5.443B In order not to cause harmful interference to the microwave landing system operating above 5 030 MHz, the aggregate power flux-density produced at the Earth's surface in the frequency band 5 030-5 150 MHz by all the space stations within any radionavigation-satellite service system (space-to-Earth) operating in the frequency band 5 010-5 030 MHz shall not exceed −124.5 dB(W/m2) in a 150 kHz band. In order not to cause

harmful interference to the radio astronomy service in the frequency band 4 990-5 000 MHz, radionavigation-satellite service systems operating in the frequency band 5 010-5 030 MHz shall comply with the limits in the frequency band 4 990-5 000 MHz defined in Resolution **741 (Rev.WRC-15)**. (WRC-15)

5.443C The use of the frequency band 5 030-5 091 MHz by the aeronautical mobile (R) service is limited to internationally standardized aeronautical systems. Unwanted emissions from the aeronautical mobile (R) service in the frequency band 5 030-5 091 MHz shall be limited to protect RNSS system downlinks in the adjacent 5 010-5 030 MHz band. Until such time that an appropriate value is established in a relevant ITU-R Recommendation, the e.i.r.p. density limit of −75 dBW/MHz in the frequency band 5 010-5 030 MHz for any AM(R)S station unwanted emission should be used. (WRC-12)

5.443D In the frequency band 5 030-5 091 MHz, the aeronautical mobile-satellite (R) service is subject to coordination under No. **9.11A**. The use of this frequency band by the aeronautical mobile-satellite (R) service is limited to internationally standardized aeronautical systems. (WRC-12)

5.444 The frequency band 5 030-5 150 MHz is to be used for the operation of the international standard system (microwave landing system) for precision approach and landing. In the frequency band 5 030-5 091 MHz, the requirements of this system shall have priority over other uses of this frequency band. For the use of the frequency band 5 091-5 150 MHz, No. **5.444A** and Resolution **114 (Rev.WRC-15)** apply. (WRC-15)

5.444A The use of the allocation to the fixed-satellite service (Earth-to-space) in the frequency band 5 091-5 150 MHz is limited to feeder links of non-geostationary satellite systems in the mobilesatellite service and is subject to coordination under No. **9.11A**. The use of the frequency band 5 091-5 150 MHz by feeder links of non-geostationary satellite systems in the mobile-satellite service shall be subject to application of Resolution **114 (Rev.WRC-15)**. Moreover, to ensure that the aeronautical radionavigation service is protected from harmful interference, coordination is required for feeder-link earth stations of the non-geostationary satellite systems in the mobilesatellite service which are separated by less than 450 km from the territory of an administration operating ground stations in the aeronautical radionavigation service. (WRC-15)

5.444B The use of the frequency band 5 091-5 150 MHz by the aeronautical mobile service is limited to:
– systems operating in the aeronautical mobile (R) service and in accordance with international aeronautical standards, limited to surface applications at airports.
Such use shall be in accordance with Resolution **748 (Rev.WRC-15)**;
– aeronautical telemetry transmissions from aircraft stations (see No. **1.83**) in accordance with Resolution **418 (Rev.WRC-15)**. (WRC-15)

5.446A The use of the bands 5 150-5 350 MHz and 5 470-5 725 MHz by the stations in the mobile, except aeronautical mobile, service shall be in accordance with Resolution **229 (Rev.WRC-12)**. (WRC-12)

5.446B In the band 5 150-5 250 MHz, stations in the mobile service shall not claim protection from earth stations in the fixed-satellite service. No. **5.43A** does not apply to the mobile service with respect to fixed-satellite service earth stations. (WRC-03)

5.446C *Additional allocation:* in Region 1 (except in Algeria, Saudi Arabia, Bahrain, Egypt, United Arab Emirates, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, Syrian Arab Republic, Sudan, South Sudan and Tunisia) and in Brazil, the band 5 150-5 250 MHz is also allocated to the aeronautical mobile service on a primary basis, limited to aeronautical telemetry transmissions from aircraft stations (see No. **1.83**), in accordance with Resolution **418 (Rev.WRC-12)**. These stations shall not claim protection from other stations operating in accordance with Article **5**. No. **5.43A** does not apply. (WRC-12)

5.447A The allocation to the fixed-satellite service (Earth-to-space) in the band 5 150-5 250 MHz is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite service and is subject to coordination under No. **9.11A**.

5.447B *Additional allocation*: the band 5 150-5 216 MHz is also allocated to the fixed-satellite service (space-to-Earth) on a primary basis. This allocation is limited to feeder links of non-geostationary-satellite systems in the mobile-satellite service and is subject to provisions of No. **9.11A**. The power flux-density at the Earth's

surface produced by space stations of the fixed-satellite service operating in the space-to-Earth direction in the band 5 150-5 216 MHz shall in no case exceed –164 dB(W/m^2) in any 4 kHz band for all angles of arrival.

5.447C Administrations responsible for fixed-satellite service networks in the band 5 150-5 250 MHz operated under Nos. **5.447A** and **5.447B** shall coordinate on an equal basis in accordance with No. **9.11A** with administrations responsible for non-geostationary-satellite networks operated under No. **5.446** and brought into use prior to 17 November 1995. Satellite networks operated under No. **5.446** brought into use after 17 November 1995 shall not claim protection from, and shall not cause harmful interference to, stations of the fixed-satellite service operated under Nos. **5.447A** and **5.447B**.

5.447D The allocation of the band 5 250-5 255 MHz to the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the band by the space research service are on a secondary basis. (WRC-97)

5.447F In the frequency band 5 250-5 350 MHz, stations in the mobile service shall not claim protection from the radiolocation service, the Earth exploration-satellite service (active) and the space research service (active). These services shall not impose on the mobile service more stringent protection criteria, based on system characteristics and interference criteria, than those stated in Recommendations ITU-R M.1638-0 and ITU-R RS.1632-0. (WRC-15)

5.448A The Earth exploration-satellite (active) and space research (active) services in the frequency band 5 250-5 350 MHz shall not claim protection from the radiolocation service. No. **5.43A** does not apply. (WRC-03)

5.448B The Earth exploration-satellite service (active) operating in the band 5 350-5 570 MHz and space research service (active) operating in the band 5 460-5 570 MHz shall not cause harmful interference to the aeronautical radionavigation service in the band 5 350-5 460 MHz, the radionavigation service in the band 5 460-5 470 MHz and the maritime radionavigation service in the band 5 470-5 570 MHz. (WRC-03)

5.448C The space research service (active) operating in the band 5 350-5 460 MHz shall not cause harmful interference to nor claim protection from other services to which this band is allocated. (WRC-03)

5.448D In the frequency band 5 350-5 470 MHz, stations in the radiolocation service shall not cause harmful interference to, nor claim protection from, radar systems in the aeronautical radionavigation service operating in accordance with No. **5.449**. (WRC-03)

5.449 The use of the band 5 350-5 470 MHz by the aeronautical radionavigation service is limited to airborne radars and associated airborne beacons.

5.450A In the frequency band 5 470-5 725 MHz, stations in the mobile service shall not claim protection from radiodetermination services. Radiodetermination services shall not impose on the mobile service more stringent protection criteria, based on system characteristics and interference criteria, than those stated in Recommendation ITU-R M.1638-0. (WRC-15)

5.450B In the frequency band 5 470-5 650 MHz, stations in the radiolocation service, except ground-based radars used for meteorological purposes in the band 5 600-5 650 MHz, shall not cause harmful interference to, nor claim protection from, radar systems in the maritime radionavigation service. (WRC-03)

5.452 Between 5 600 MHz and 5 650 MHz, ground-based radars used for meteorological purposes are authorized to operate on a basis of equality with stations of the maritime radionavigation service.

5.453 *Additional allocation:* in Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Cameroon, China, Congo (Rep. of the), Korea (Rep. of), Côte d'Ivoire, Djibouti, Egypt, the United Arab Emirates, Gabon, Guinea, Equatorial Guinea, India, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Japan, Jordan, Kenya, Kuwait, Lebanon, Libya, Madagascar, Malaysia, Niger, Nigeria, Oman, Uganda, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, the Dem. People's Rep. of Korea, Singapore, Sri Lanka, Swaziland, Tanzania, Chad, Thailand, Togo, Viet Nam and Yemen, the band 5 650-5 850 MHz is also allocated to the fixed and mobile services on a primary basis. In this case, the provisions of Resolution **229 (Rev.WRC-12)** do not apply. (WRC-12)

5.457A In the frequency bands 5 925-6 425 MHz and 14-14.5 GHz, earth stations located on board vessels may communicate with space stations of the fixed-satellite service. Such use shall be in accordance with Resolution **902 (Rev.WRC-03)**. In the frequency band 5 925-6 425 MHz, earth stations located on board vessels and communicating with space stations of the fixed-satellite service may employ transmit antennas with minimum diameter of 1.2 m and operate without prior agreement of any administration if located at least 330 km away from the low-water mark as officially recognized by the coastal State. All other provisions of Resolution **902 (WRC-03)** shall apply. (WRC-15)

5.457B In the frequency bands 5 925-6 425 MHz and 14-14.5 GHz, earth stations located on board vessels may operate with the characteristics and under the conditions contained in Resolution **902 (WRC-03)** in Algeria, Saudi Arabia, Bahrain, Comoros, Djibouti, Egypt, United Arab Emirates, Jordan, Kuwait, Libya, Morocco, Mauritania, Oman, Qatar, the Syrian Arab Republic, Sudan, Tunisia and Yemen, in the maritime mobile-satellite service on a secondary basis. Such use shall be in accordance with Resolution **902 (WRC-03)**. (WRC-15)

5.458 In the band 6 425-7 075 MHz, passive microwave sensor measurements are carried out over the oceans. In the band 7 075-7 250 MHz, passive microwave sensor measurements are carried out. Administrations should bear in mind the needs of the Earth exploration-satellite (passive) and space research (passive) services in their future planning of the bands 6 425-7 075 MHz and 7 075-7 250 MHz.

5.458A In making assignments in the band 6 700-7 075 MHz to space stations of the fixed-satellite service, administrations are urged to take all practicable steps to protect spectral line observations of the radio astronomy service in the band 6 650-6 675.2 MHz from harmful interference from unwanted emissions.

5.458B The space-to-Earth allocation to the fixed-satellite service in the band 6 700-7 075 MHz is limited to feeder links for non-geostationary satellite systems of the mobile-satellite service and is subject to coordination under No. **9.11A**. The use of the band 6 700-7 075 MHz (space-to-Earth) by feeder links for non-geostationary satellite systems in the mobile-satellite service is not subject to No. **22.2**.

5.460 No emissions from space research service (Earth-to-space) systems intended for deep space shall be effected in the frequency band 7 190-7 235 MHz. Geostationary satellites in the space research service operating in the frequency band 7 190-7 235 MHz shall not claim protection from existing and future stations of the fixed and mobile services and No. **5.43A** does not apply. (WRC-15)

5.460A The use of the frequency band 7 190-7 250 MHz (Earth-to-space) by the Earth exploration-satellite service shall be limited to tracking, telemetry and command for the operation of spacecraft. Space stations operating in the Earth exploration-satellite service (Earth-to-space) in the frequency band 7 190-7 250 MHz shall not claim protection from existing and future stations in the fixed and mobile services, and No. **5.43A** does not apply. No. **9.17** applies. Additionally, to ensure protection of the existing and future deployment of fixed and mobile services, the location of earth stations supporting spacecraft in the Earth exploration-satellite service in non-geostationary orbits or geostationary orbit shall maintain a separation distance of at least 10 km and 50 km, respectively, from the respective border(s) of neighbouring countries, unless a shorter distance is otherwise agreed between the corresponding administrations. (WRC-15)

5.460B Space stations on the geostationary orbit operating in the Earth exploration-satellite service (Earth-to-space) in the frequency band 7 190-7 235 MHz shall not claim protection from existing and future stations of the space research service, and No. **5.43A** does not apply. (WRC-15)

5.461 *Additional allocation:* the bands 7 250-7 375 MHz (space-to-Earth) and 7 900-8 025 MHz (Earth-to-space) are also allocated to the mobile-satellite service on a primary basis, subject to agreement obtained under No. **9.21**.

5.461A The use of the band 7 450-7 550 MHz by the meteorological-satellite service (space-to-Earth) is limited to geostationary-satellite systems. Non-geostationary meteorological-satellite systems in this band notified before 30 November 1997 may continue to operate on a primary basis until the end of their lifetime. (WRC-97)

5.461B The use of the band 7 750-7 900 MHz by the meteorological-satellite service (space-to-Earth) is limited to non-geostationary satellite systems. (WRC-12)

5.461AA The use of the frequency band 7 375-7 750 MHz by the maritime mobile-satellite service is limited to geostationary-satellite networks. (WRC-15)

5.461AB In the frequency band 7 375-7 750 MHz, earth stations in the maritime mobile-satellite service shall not claim protection from, nor constrain the use and development of, stations in the fixed and mobile, except aeronautical mobile, services. No. **5.43A** does not apply. (WRC-15)

5.462A In Regions 1 and 3 (except for Japan), in the band 8 025-8 400 MHz, the Earth exploration-satellite service using geostationary satellites shall not produce a power flux-density in excess of the following values for angles of arrival (θ), without the consent of the affected administration:

-135 dB(W/m^2) in a 1 MHz band	for	$0° \le \theta < 5°$
$-135 + 0.5\,(\theta - 5)$ dB(W/m^2) in a 1 MHz band	for	$5° \le \theta < 5°$
-125 dB(W/m^2) in a 1 MHz band	for	$25° \le \theta \le 90°$

(WRC-12)

5.463 Aircraft stations are not permitted to transmit in the band 8 025-8 400 MHz. (WRC-97)

5.465 In the space research service, the use of the band 8 400-8 450 MHz is limited to deep space.

5.468 *Additional allocation:* in Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Burundi, Cameroon, China, Congo (Rep. of the), Djibouti, Egypt, the United Arab Emirates, Gabon, Guyana, Indonesia, Iran (Islamic Republic of), Iraq, Jamaica, Jordan, Kenya, Kuwait, Lebanon, Libya, Malaysia, Mali, Morocco, Mauritania, Nepal, Nigeria, Oman, Uganda, Pakistan, Qatar, Syrian Arab Republic, the Dem. People's Rep. of Korea, Senegal, Singapore, Somalia, Sudan, Swaziland, Chad, Togo, Tunisia and Yemen, the frequency band 8 500-8 750 MHz is also allocated to the fixed and mobile services on a primary basis. (WRC-15)

5.469A In the band 8 550-8 650 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, or constrain the use and development of, stations of the radiolocation service. (WRC-97)

5.470 The use of the band 8 750-8 850 MHz by the aeronautical radionavigation service is limited to airborne Doppler navigation aids on a centre frequency of 8 800 MHz.

5.471 *Additional allocation:* in Algeria, Germany, Bahrain, Belgium, China, Egypt, the United Arab Emirates, France, Greece, Indonesia, Iran (Islamic Republic of), Libya, the Netherlands, Qatar and Sudan, the frequency bands 8 825-8 850 MHz and 9 000-9 200 MHz are also allocated to the maritime radionavigation service, on a primary basis, for use by shore-based radars only. (WRC-15)

5.472 In the bands 8 850-9 000 MHz and 9 200-9 225 MHz, the maritime radionavigation service is limited to shore-based radars.

5.473A In the band 9 000-9 200 MHz, stations operating in the radiolocation service shall not cause harmful interference to, nor claim protection from, systems identified in No. **5.337** operating in the aeronautical radionavigation service, or radar systems in the maritime radionavigation service operating in this band on a primary basis in the countries listed in No. **5.471**. (WRC-07)

5.474 In the band 9 200-9 500 MHz, search and rescue transponders (SART) may be used, having due regard to the appropriate ITU-R Recommendation (see also Article **31**).

5.474A The use of the frequency bands 9 200-9 300 MHz and 9 900-10 400 MHz by the Earth exploration-satellite service (active) is limited to systems requiring necessary bandwidth greater than 600 MHz that cannot be fully accommodated within the frequency band 9 300-9 900 MHz.

Such use is subject to agreement to be obtained under No. **9.21** from Algeria, Saudi Arabia, Bahrain, Egypt, Indonesia, Iran (Islamic Republic of), Lebanon and Tunisia. An administration that has not replied under No. **9.52** is considered as not having agreed to the coordination request. In this case, the notifying administration of the satellite system operating in the Earth exploration-satellite service (active) may request the assistance of the Bureau under Sub-Section IID of Article **9**. (WRC-15)

5.474B Stations operating in the Earth exploration-satellite (active) service shall comply with Recommendation ITU-R RS.2066-0. (WRC-15)

5.474C Stations operating in the Earth exploration-satellite (active) service shall comply with Recommendation ITU-R RS.2065-0. (WRC-15)

5.474D Stations in the Earth exploration-satellite service (active) shall not cause harmful interference to, or claim protection from, stations of the maritime radionavigation and radiolocation services in the frequency band 9 200-9 300 MHz, the radionavigation and radiolocation services in the frequency band 9 900-10 000 MHz and the radiolocation service in the frequency band 10.0- 10.4 GHz. (WRC-15)

5.475 The use of the band 9 300-9 500 MHz by the aeronautical radionavigation service is limited to airborne weather radars and ground-based radars. In addition, ground-based radar beacons in the aeronautical radionavigation service are permitted in the band 9 300-9 320 MHz on condition that harmful interference is not caused to the maritime radionavigation service. (WRC-07)

5.475A The use of the band 9 300-9 500 MHz by the Earth exploration-satellite service (active) and the space research service (active) is limited to systems requiring necessary bandwidth greater than 300 MHz that cannot be fully accommodated within the 9 500-9 800 MHz band. (WRC-07)

5.475B In the band 9 300-9 500 MHz, stations operating in the radiolocation service shall not cause harmful interference to, nor claim protection from, radars operating in the radionavigation service in conformity with the Radio Regulations. Ground-based radars used for meteorological purposes have priority over other radiolocation uses. (WRC-07)

5.476A In the band 9 300-9 800 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, nor claim protection from, stations of the radionavigation and radiolocation services. (WRC-07)

5.477 *Different category of service:* in Algeria, Saudi Arabia, Bahrain, Bangladesh, Brunei Darussalam, Cameroon, Djibouti, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Guyana, India, Indonesia, Iran (Islamic Republic of), Iraq, Jamaica, Japan, Jordan, Kuwait, Lebanon, Liberia, Malaysia, Nigeria, Oman, Uganda, Pakistan, Qatar, Syrian Arab Republic, the Dem. People's Rep. of Korea, Singapore, Somalia, Sudan, South Sudan, Trinidad and Tobago, and Yemen, the allocation of the frequency band 9 800-10 000 MHz to the fixed service is on a primary basis (see No. **5.33**). (WRC-15)

5.478A The use of the band 9 800-9 900 MHz by the Earth exploration-satellite service (active) and the space research service (active) is limited to systems requiring necessary bandwidth greater than 500 MHz that cannot be fully accommodated within the 9 300-9 800 MHz band. (WRC-07)

5.478B In the band 9 800-9 900 MHz, stations in the Earth exploration-satellite service (active) and space research service (active) shall not cause harmful interference to, nor claim protection from stations of the fixed service to which this band is allocated on a secondary basis. (WRC-07)

5.479 The band 9 975-10 025 MHz is also allocated to the meteorological-satellite service on a secondary basis for use by weather radars.

5.482 In the band 10.6-10.68 GHz, the power delivered to the antenna of stations of the fixed and mobile, except aeronautical mobile, services shall not exceed −3 dBW. This limit may be exceeded, subject to agreement obtained under No. **9.21**. However, in Algeria, Saudi Arabia, Armenia, Azerbaijan, Bahrain, Bangladesh, Belarus, Egypt, United Arab Emirates, Georgia, India, Indonesia, Iran (Islamic Republic of), Iraq, Jordan, Kazakhstan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Moldova, Nigeria, Oman, Uzbekistan, Pakistan,

Philippines, Qatar, Syrian Arab Republic, Kyrgyzstan, Singapore, Tajikistan, Tunisia, Turkmenistan and Viet Nam, this restriction on the fixed and mobile, except aeronautical mobile, services is not applicable. (WRC-07)

5.482A For sharing of the band 10.6-10.68 GHz between the Earth exploration-satellite (passive) service and the fixed and mobile, except aeronautical mobile, services, Resolution **751 (WRC-07)** applies. (WRC-07)

5.483 *Additional allocation:* in Saudi Arabia, Armenia, Azerbaijan, Bahrain, Belarus, China, Colombia, Korea (Rep. of), Costa Rica, Egypt, the United Arab Emirates, Georgia, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kazakhstan, Kuwait, Lebanon, Mongolia, Qatar, Kyrgyzstan, the Dem. People's Rep. of Korea, Tajikistan, Turkmenistan and Yemen, 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. (WRC-12)

5.484 In Region 1, the use of the band 10.7-11.7 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service.

5.484A The use of the bands 10.95-11.2 GHz (space-to-Earth), 11.45-11.7 GHz (space-to-Earth), 11.7-12.2 GHz (space-to-Earth) in Region 2, 12.2-12.75 GHz (space-to-Earth) in Region 3, 12.5-12.75 GHz (space-to-Earth) in Region 1, 13.75-14.5 GHz (Earth-to-space), 17.8-18.6 GHz (space-to-Earth), 19.7-20.2 GHz (space-to-Earth), 27.5-28.6 GHz (Earth-to-space), 29.5-30 GHz (Earth-to-space) by a non-geostationary-satellite system in the fixed-satellite service is subject to application of the provisions of No. **9.12** for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. **5.43A** does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-2000)

5.484B Resolution **155 (WRC-15)** shall apply. (WRC-15)

5.487 In the band 11.7-12.5 GHz in Regions 1 and 3, the fixed, fixed-satellite, mobile, except aeronautical mobile, and broadcasting services, in accordance with their respective allocations, shall not cause harmful interference to, or claim protection from, broadcasting-satellite stations operating in accordance with the Regions 1 and 3 Plan in Appendix **30**. (WRC-03)

5.487A *Additional allocation:* in Region 1, the band 11.7-12.5 GHz, in Region 2, the band 12.2-12.7 GHz and, in Region 3, the band 11.7-12.2 GHz, are also allocated to the fixed-satellite service (space-to-Earth) on a primary basis, limited to non-geostationary systems and subject to application of the provisions of No. **9.12** for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the broadcasting-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. **5.43A** does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-03)

5.492 Assignments to stations of the broadcasting-satellite service which are in conformity with the appropriate regional Plan or included in the Regions 1 and 3 List in Appendix **30** 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 conformity with the Plan or the List, as appropriate. (WRC-2000)

5.494 *Additional allocation:* in Algeria, Saudi Arabia, Bahrain, Cameroon, the Central African Rep., Congo (Rep. of the), Côte d'Ivoire, Djibouti, Egypt, the United Arab Emirates, Eritrea, Ethiopia, Gabon, Ghana, Guinea, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Madagascar, Mali, Morocco, Mongolia, Nigeria, Oman, Qatar,

the Syrian Arab Republic, the Dem. Rep. of the Congo, Somalia, Sudan, South Sudan, Chad, Togo and Yemen, the frequency band 12.5-12.75 GHz is also allocated to the fixed and mobile, except aeronautical mobile, services on a primary basis. (WRC-15)

5.497 The use of the band 13.25-13.4 GHz by the aeronautical radionavigation service is limited to Doppler navigation aids.

5.498A The Earth exploration-satellite (active) and space research (active) services operating in the band 13.25-13.4 GHz shall not cause harmful interference to, or constrain the use and development of, the aeronautical radionavigation service. (WRC-97)

5.499A The use of the frequency band 13.4-13.65 GHz by the fixed-satellite service (space-to- Earth) is limited to geostationary-satellite systems and is subject to agreement obtained under No. **9.21** with respect to satellite systems operating in the space research service (space-to-space) to relay data from space stations in the geostationary-satellite orbit to associated space stations in nongeostationary satellite orbits for which advance publication information has been received by the Bureau by 27 November 2015. (WRC-15)

5.499B Administrations shall not preclude the deployment and operation of transmitting earth stations in the standard frequency and time signal-satellite service (Earth-to-space) allocated on a secondary basis in the frequency band 13.4-13.65 GHz due to the primary allocation to FSS (spaceto- Earth). (WRC-15)

5.499C The allocation of the frequency band 13.4-13.65 GHz to the space research service on a primary basis is limited to:

– satellite systems operating in the space research service (space-to-space) to relay data from space stations in the geostationary-satellite orbit to associated space stations in non-geostationary satellite orbits for which advance publication information has been received by the Bureau by 27 November 2015,
– active spaceborne sensors,
– satellite systems operating in the space research service (space-to-Earth) to relay data from space stations in the geostationary-satellite orbit to associated earth stations.

Other uses of the frequency band by the space research service are on a secondary basis. (WRC-15)

5.499D In the frequency band 13.4-13.65 GHz, satellite systems in the space research service (space-to-Earth) and/or the space research service (space-to-space) shall not cause harmful interference to, nor claim protection from, stations in the fixed, mobile, radiolocation and Earth exploration-satellite (active) services. (WRC-15)

5.499E In the frequency band 13.4-13.65 GHz, geostationary-satellite networks in the fixedsatellite service (space-to-Earth) shall not claim protection from space stations in the Earth exploration-satellite service (active) operating in accordance with these Regulations, and No. **5.43A** does not apply. The provisions of No. **22.2** do not apply to the Earth exploration-satellite service (active) with respect to the fixed-satellite service (space-to-Earth) in this frequency band. (WRC-15)

5.500 *Additional allocation:* in Algeria, Saudi Arabia, Bahrain, Brunei Darussalam, Cameroon, Egypt, the United Arab Emirates, Gabon, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kuwait, Lebanon, Madagascar, Malaysia, Mali, Morocco, Mauritania, Niger, Nigeria, Oman, Qatar, the Syrian Arab Republic, Singapore, Sudan, South Sudan, Chad and Tunisia, the frequency band 13.4-14 GHz is also allocated to the fixed and mobile services on a primary basis. In Pakistan, the frequency band 13.4-13.75 GHz is also allocated to the fixed and mobile services on a primary basis. (WRC-15)

5.501A The allocation of the frequency band 13.65-13.75 GHz to the space research service on a primary basis is limited to active spaceborne sensors. Other uses of the frequency band by the space research service are on a secondary basis. (WRC-15)

5.501B In the band 13.4-13.75 GHz, the Earth exploration-satellite (active) and space research (active) services shall not cause harmful interference to, or constrain the use and development of, the radiolocation service. (WRC-97)

5.502 In the band 13.75-14 GHz, an earth station of a geostationary fixed-satellite service network shall have a minimum antenna diameter of 1.2 m and an earth station of a non-geostationary fixed-satellite service system shall have a minimum antenna diameter of 4.5 m. In addition, the e.i.r.p., averaged over one second, radiated by a station in the radiolocation or radionavigation services shall not exceed 59 dBW for elevation angles above 2° and 65 dBW at lower angles. Before an administration brings into use an earth station in a geostationary-satellite network in the fixed-satellite service in this band with an antenna diameter smaller than 4.5 m, it shall ensure that the power flux-density produced by this earth station does not exceed:

– –115 dB(W/(m^2 · 10 MHz)) for more than 1% of the time produced at 36 m above sea level at the low water mark, as officially recognized by the coastal State;

– –115 dB(W/(m^2 · 10 MHz)) for more than 1% of the time produced 3 m above ground at the border of the territory of an administration deploying or planning to deploy land mobile radars in this band, unless prior agreement has been obtained.

For earth stations within the fixed-satellite service having an antenna diameter greater than or equal to 4.5 m, the e.i.r.p. of any emission should be at least 68 dBW and should not exceed 85 dBW. (WRC-03)

5.503 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 Bureau 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 those geostationary space stations in the space research service for which information for advance publication has been received by the Bureau prior to 31 January 1992 cease to operate in this band:

– in the band 13.77-13.78 GHz, the e.i.r.p. density of emissions from any earth station in the fixed-satellite service operating with a space station in geostationary-satellite orbit shall not exceed:

i) 4.7D + 28 dB(W/40 kHz), where D is the fixed-satellite service earth station antenna diameter (m) for antenna diameters equal to or greater than 1.2 m and less than 4.5 m;

ii) 49.2 + 20 log(D/4.5) dB(W/40 kHz), where D is the fixed-satellite service earth station antenna diameter (m) for antenna diameters equal to or greater than 4.5 m and less than 31.9 m;

ii) 66.2 dB(W/40 kHz) for any fixed-satellite service earth station for antenna diameters (m) equal to or greater than 31.9 m;

iv) 56.2 dB(W/4 kHz) for narrow-band (less than 40 kHz of necessary bandwidth) fixed-satellite service earth station emissions from any fixed-satellite service earth station having an antenna diameter of 4.5 m or greater;

– the e.i.r.p. density of emissions from any earth station in the fixed-satellite service operating with a space station in non-geostationary-satellite orbit shall not exceed 51 dBW in the 6 MHz band from 13.772 to 13.778 GHz.

Automatic power control may be used to increase the e.i.r.p. density in these frequency ranges to compensate for rain attenuation, to the extent that the power flux-density at the fixed-satellite service space station does not exceed the value resulting from use by an earth station of an e.i.r.p. meeting the above limits in clear-sky conditions. (WRC-03)

5.504 The use of the band 14-14.3 GHz by the radionavigation service shall be such as to provide sufficient protection to space stations of the fixed-satellite service.

5.504A In the band 14-14.5 GHz, aircraft earth stations in the secondary aeronautical mobile-satellite service may also communicate with space stations in the fixed-satellite service. The provisions of Nos. **5.29**, **5.30** and **5.31** apply. (WRC-03)

5.504B Aircraft earth stations operating in the aeronautical mobile-satellite service in the frequency band 14-14.5 GHz shall comply with the provisions of Annex 1, Part C of Recommendation ITU-R M.1643-0, with respect to any radio astronomy station performing observations in the 14.47-14.5 GHz frequency band located on the territory of Spain, France, India, Italy, the United Kingdom and South Africa. (WRC-15)

5.504C In the frequency band 14-14.25 GHz, the power flux-density produced on the territory of the countries of Saudi Arabia, Bahrain, Botswana, Côte d'Ivoire, Egypt, Guinea, India, Iran (Islamic Republic of), Kuwait, Nigeria, Oman, the Syrian Arab Republic and Tunisia by any aircraft earth station in the aeronautical mobile-satellite service shall not exceed the limits given in Annex 1, Part B of Recommendation ITU-R M.1643-0, unless

otherwise specifically agreed by the affected administration(s). The provisions of this footnote in no way derogate the obligations of the aeronautical mobile-satellite service to operate as a secondary service in accordance with No. **5.29**. (WRC-15)

5.505 *Additional allocation:* in Algeria, Saudi Arabia, Bahrain, Botswana, Brunei Darussalam, Cameroon, China, Congo (Rep. of the), Korea (Rep. of), Djibouti, Egypt, the United Arab Emirates, Gabon, Guinea, India, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Japan, Jordan, Kuwait, Lebanon, Malaysia, Mali, Morocco, Mauritania, Oman, the Philippines, Qatar, the Syrian Arab Republic, the Dem. People's Rep. of Korea, Singapore, Somalia, Sudan, South Sudan, Swaziland, Chad, Viet Nam and Yemen, the frequency band 14-14.3 GHz is also allocated to the fixed service on a primary basis. (WRC-15)

5.506A In the band 14-14.5 GHz, ship earth stations with an e.i.r.p. greater than 21 dBW shall operate under the same conditions as earth stations located on board vessels, as provided in Resolution **902 (WRC-03)**. This footnote shall not apply to ship earth stations for which the complete Appendix **4** information has been received by the Bureau prior to 5 July 2003. (WRC-03)

5.506B Earth stations located on board vessels communicating with space stations in the fixed-satellite service may operate in the frequency band 14-14.5 GHz without the need for prior agreement from Cyprus and Malta, within the minimum distance given in Resolution 902 (WRC-03) from these countries. (WRC-15)

5.508A In the frequency band 14.25-14.3 GHz, the power flux-density produced on the territory of the countries of Saudi Arabia, Bahrain, Botswana, China, Côte d'Ivoire, Egypt, France, Guinea, India, Iran (Islamic Republic of), Italy, Kuwait, Nigeria, Oman, the Syrian Arab Republic, the United Kingdom and Tunisia by any aircraft earth station in the aeronautical mobile-satellite service shall not exceed the limits given in Annex 1, Part B of Recommendation ITU-R M.1643-0, unless otherwise specifically agreed by the affected administration(s). The provisions of this footnote in no way derogate the obligations of the aeronautical mobile-satellite service to operate as a secondary service in accordance with No. **5.29**. (WRC-15)

5.509A In the frequency band 14.3-14.5 GHz, the power flux-density produced on the territory of the countries of Saudi Arabia, Bahrain, Botswana, Cameroon, China, Côte d'Ivoire, Egypt, France, Gabon, Guinea, India, Iran (Islamic Republic of), Italy, Kuwait, Morocco, Nigeria, Oman, the Syrian Arab Republic, the United Kingdom, Sri Lanka, Tunisia and Viet Nam by any aircraft earth station in the aeronautical mobile-satellite service shall not exceed the limits given in Annex 1, Part B of Recommendation ITU-R M.1643-0, unless otherwise specifically agreed by the affected administration(s). The provisions of this footnote in no way derogate the obligations of the aeronautical mobile-satellite service to operate as a secondary service in accordance with No. **5.29**. (WRC-15)

5.509B The use of the frequency bands 14.5-14.75 GHz in countries listed in Resolution **163 (WRC-15)** and 14.5-14.8 GHz in countries listed in Resolution **164 (WRC-15)** by the fixed-satellite service (Earth-to-space) not for feeder links for the broadcastingsatellite service is limited to geostationary-satellites. (WRC-15)

5.509C For the use of the frequency bands 14.5-14.75 GHz in countries listed in Resolution **163 (WRC-15)** and 14.5-14.8 GHz in countries listed in Resolution **164 (WRC-15)** by the fixed-satellite service (Earth-to-space) not for feeder links for the broadcastingsatellite service, the fixed-satellite service earth stations shall have a minimum antenna diameter of 6 m and a maximum power spectral density of −44.5 dBW/Hz at the input of the antenna. The earth stations shall be notified at known locations on land. (WRC-15)

5.509D Before an administration brings into use an earth station in the fixed-satellite service (Earth-to-space) not for feeder links for the broadcasting-satellite service in the frequency bands 14.5-14.75 GHz (in countries listed in Resolution **163 (WRC-15)**) and 14.5-14.8 GHz (in countries listed in Resolution **164 (WRC-15)**), it shall ensure that the power flux-density produced by this earth station does not exceed −151.5 dB(W/(m·· 4 kHz)) produced at all altitudes from 0 m to 19 000 m above sea level at 22 km seaward from all coasts, defined as the low-water mark, as officially recognized by each coastal State. (WRC-15)

5.509E In the frequency bands 14.50-14.75 GHz in countries listed in Resolution **163 (WRC-15)** and 14.50-14.8 GHz in countries listed in Resolution **164 (WRC-15)**, the location of earth stations in the fixed-satellite service

(Earth-to-space) not for feeder links for the broadcasting-satellite service shall maintain a separation distance of at least 500 km from the border(s) of other countries unless shorter distances are explicitly agreed by those administrations.
No. **9.17** does not apply. When applying this provision, administrations should consider the relevant parts of these Regulations and the latest relevant ITU-R Recommendations. (WRC-15)

5.509F In the frequency bands 14.50-14.75 GHz in countries listed in Resolution **163 (WRC-15)** and 14.50-14.8 GHz in countries listed in Resolution **164 (WRC-15)**, earth stations in the fixed-satellite service (Earth-to-space) not for feeder links for the broadcasting-satellite service shall not constrain the future deployment of the fixed and mobile services. (WRC-15)

5.509G The frequency band 14.5-14.8 GHz is also allocated to the space research service on a primary basis. However, such use is limited to the satellite systems operating in the space research service (Earth-to-space) to relay data to space stations in the geostationary-satellite orbit from associated earth stations. Stations in the space research service shall not cause harmful interference
to, or claim protection from, stations in the fixed and mobile services and in the fixed-satellite service limited to feeder links for the broadcasting-satellite service and associated space operations functions using the guardbands under Appendix **30A** and feeder links for the broadcasting-satellite service in Region 2. Other uses of this frequency band by the space research service are on a secondary basis. (WRC-15)

5.510 Except for use in accordance with Resolution **163 (WRC-15)** and Resolution **164 (WRC-15)**, the use of the frequency band 14.5-14.8 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service. This use is reserved for countries outside Europe. Uses other than feeder links for the broadcasting-satellite service are not authorized in Regions 1 and 2 in the frequency band 14.75-14.8 GHz. (WRC-15)

5.511 *Additional allocation:* in Saudi Arabia, Bahrain, Cameroon, Egypt, the United Arab Emirates, Guinea, Iran (Islamic Republic of), Iraq, Israel, Kuwait, Lebanon, Oman, Pakistan, Qatar, the Syrian Arab Republic and Somalia, the band 15.35-15.4 GHz is also allocated to the fixed and mobile services on a secondary basis. (WRC-12)

5.511A Use of the frequency band 15.43-15.63 GHz by the fixed-satellite service (Earth-tospace) is limited to feeder links of non-geostationary systems in the mobile-satellite service, subject to coordination under No. **9.11A**. (WRC-15)

5.511C Stations operating in the aeronautical radionavigation service shall limit the effective e.i.r.p. in accordance with Recommendation ITU-R S.1340-0. The minimum coordination distance required to protect the aeronautical radionavigation stations (No. **4.10** applies) from harmful interference from feeder-link earth stations and the maximum e.i.r.p. transmitted towards the local horizontal plane by a feeder-link earth station shall be in accordance with Recommendation ITU-R S.1340-0. (WRC-15)

5.511E In the frequency band 15.4-15.7 GHz, stations operating in the radiolocation service shall not cause harmful interference to, or claim protection from, stations operating in the aeronautical radionavigation service. (WRC-12)

5.511F In order to protect the radio astronomy service in the frequency band 15.35-15.4 GHz, radiolocation stations operating in the frequency band 15.4-15.7 GHz shall not exceed the power flux-density level of -156 dB(W/m^2) in a 50 MHz bandwidth in the frequency band 15.35-15.4 GHz, at any radio astronomy observatory site for more than 2 per cent of the time. (WRC-12)

5.512 *Additional allocation:* in Algeria, Saudi Arabia, Austria, Bahrain, Bangladesh, Brunei Darussalam, Cameroon, Congo (Rep. of the), Egypt, El Salvador, the United Arab Emirates, Eritrea, Finland, Guatemala, India, Indonesia, Iran (Islamic Republic of), Jordan, Kenya, Kuwait, Lebanon, Libya, Malaysia, Mali, Morocco, Mauritania, Montenegro, Nepal, Nicaragua, Niger, Oman, Pakistan, Qatar, Syrian Arab Republic, the Dem. Rep. of the Congo, Singapore, Somalia, Sudan, South Sudan, Chad, Togo and Yemen, the frequency band 15.7-17.3 GHz is also allocated to the fixed and mobile services on a primary basis. (WRC-15)

5.513A Spaceborne active sensors operating in the band 17.2-17.3 GHz shall not cause harmful interference to, or constrain the development of, the radiolocation and other services allocated on a primary basis. (WRC-97)

5.514 *Additional allocation:* in Algeria, Saudi Arabia, Bahrain, Bangladesh, Cameroon, El Salvador, the United Arab Emirates, Guatemala, India, Iran (Islamic Republic of), Iraq, Israel, Italy, Japan, Jordan, Kuwait, Libya, Lithuania, Nepal, Nicaragua, Nigeria, Oman, Uzbekistan, Pakistan, Qatar, Kyrgyzstan, Sudan and South Sudan, the frequency band 17.3-17.7 GHz is also allocated to the fixed and mobile services on a secondary basis. The power limits given in Nos. **21.3** and **21.5** shall apply. (WRC-15)

5.515 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 § 1 of Annex 4 of Appendix **30A**.

5.516 The use of the band 17.3-18.1 GHz by geostationary-satellite systems in the fixed-satellite service (Earth-to-space) is limited to feeder links for the broadcasting-satellite service. The use of the band 17.3-17.8 GHz in Region 2 by systems in the fixed-satellite service (Earth-to-space) is limited to geostationary satellites. For the use of the band 17.3-17.8 GHz in Region 2 by feeder links for the broadcasting-satellite service in the band 12.2-12.7 GHz, see Article **11**. The use of the bands 17.3-18.1 GHz (Earth-to-space) in Regions 1 and 3 and 17.8-18.1 GHz (Earth-to-space) in Region 2 by non-geostationary-satellite systems in the fixed-satellite service is subject to application of the provisions of No. **9.12** for coordination with other non-geostationary-satellite systems in the fixed-satellite service. Non-geostationary-satellite systems in the fixed-satellite service shall not claim protection from geostationary-satellite networks in the fixed-satellite service operating in accordance with the Radio Regulations, irrespective of the dates of receipt by the Bureau of the complete coordination or notification information, as appropriate, for the non-geostationary-satellite systems in the fixed-satellite service and of the complete coordination or notification information, as appropriate, for the geostationary-satellite networks, and No. **5.43A** does not apply. Non-geostationary-satellite systems in the fixed-satellite service in the above bands shall be operated in such a way that any unacceptable interference that may occur during their operation shall be rapidly eliminated. (WRC-2000)

5.516A In the band 17.3-17.7 GHz, earth stations of the fixed-satellite service (space-to-Earth) in Region 1 shall not claim protection from the broadcasting-satellite service feeder-link earth stations operating under Appendix **30A**, nor put any limitations or restrictions on the locations of the broadcasting-satellite service feeder-link earth stations anywhere within the service area of the feeder link. (WRC-03)

5.516B The following bands are identified for use by high-density applications in the fixed-satellite service:

17.3-17.7 GHz	(space-to-Earth) in Region 1,
18.3-19.3 GHz	(space-to-Earth) in Region 2,
19.7-20.2 GHz	(space-to-Earth) in all Regions,
39.5-40 GHz	(space-to-Earth) in Region 1,
40-40.5 GHz	(space-to-Earth) in all Regions,
40.5-42 GHz	(space-to-Earth) in Region 2,
47.5-47.9 GHz	(space-to-Earth) in Region 1,
48.2-48.54 GHz	(space-to-Earth) in Region 1,
49.44-50.2 GHz	(space-to-Earth) in Region 1,
and	
27.5-27.82 GHz	(Earth-to-space) in Region 1,
28.35-28.45 GHz	(Earth-to-space) in Region 2,
28.45-28.94 GHz	(Earth-to-space) in all Regions,
28.94-29.1 GHz	(Earth-to-space) in Region 2 and 3,
29.25-29.46 GHz	(Earth-to-space) in Region 2,
29.46-30 GHz	(Earth-to-space) in all Regions,
48.2-50.2 GHz	(Earth-to-space) in Region 2.

This identification does not preclude the use of these bands by other fixed-satellite service applications or by other services to which these bands are allocated on a co-primary basis and does not establish priority in these

Radio Regulations among users of the bands. Administrations should take this into account when considering regulatory provisions in relation to these bands. See Resolution **143 (WRC-03)***. (WRC-03)

5.519 *Additional allocation:* the bands 18-18.3 GHz in Region 2 and 18.1-18.4 GHz in Regions 1 and 3 are also allocated to the meteorological-satellite service (space-to-Earth) on a primary basis. Their use is limited to geostationary satellites. (WRC-07)

5.520 The use of the band 18.1-18.4 GHz by the fixed-satellite service (Earth-to-space) is limited to feeder links of geostationary-satellite systems in the broadcasting-satellite service. (WRC-2000)

5.521 *Alternative allocation:* in the United Arab Emirates and Greece, the frequency band 18.1-18.4 GHz is allocated to the fixed, fixed-satellite (space-to-Earth) and mobile services on a primary basis (see No. **5.33**). The provisions of No. **5.519** also apply. (WRC-15)

5.522A The emissions of the fixed service and the fixed-satellite service in the band 18.6-18.8 GHz are limited to the values given in Nos. **21.5A** and **21.16.2**, respectively. (WRC-2000)

5.522B The use of the band 18.6-18.8 GHz by the fixed-satellite service is limited to geostationary systems and systems with an orbit of apogee greater than 20 000 km. (WRC-2000)

5.522C In the band 18.6-18.8 GHz, in Algeria, Saudi Arabia, Bahrain, Egypt, the United Arab Emirates, Jordan, Lebanon, Libya, Morocco, Oman, Qatar, the Syrian Arab Republic, Tunisia and Yemen, fixed-service systems in operation at the date of entry into force of the Final Acts of WRC-2000 are not subject to the limits of No. **21.5A**. (WRC-2000)

5.523A The use of the bands 18.8-19.3 GHz (space-to-Earth) and 28.6-29.1 GHz (Earth-to-space) by geostationary and non-geostationary fixed-satellite service networks is subject to the application of the provisions of No. **9.11A** and No. **22.2** does not apply. Administrations having geostationary-satellite networks under coordination prior to 18 November 1995 shall cooperate to the maximum extent possible to coordinate pursuant to No. **9.11A** with non-geostationary-satellite networks for which notification information has been received by the Bureau prior to that date, with a view to reaching results acceptable to all the parties concerned. Non-geostationary-satellite networks shall not cause unacceptable interference to geostationary fixed-satellite service networks for which complete Appendix **4** notification information is considered as having been received by the Bureau prior to 18 November 1995. (WRC-97)

5.523B The use of the band 19.3-19.6 GHz (Earth-to-space) by the fixed-satellite service is limited to feeder links for non-geostationary-satellite systems in the mobile-satellite service. Such use is subject to the application of the provisions of No. **9.11A**, and No. **22.2** does not apply.

5.523C No. **22.2** shall continue to apply in the bands 19.3-19.6 GHz and 29.1-29.4 GHz, between feeder links of non-geostationary mobile-satellite service networks and those fixed-satellite service networks for which complete Appendix **4** coordination information, or notification information, is considered as having been received by the Bureau prior to 18 November 1995. (WRC-97)

5.523D The use of the band 19.3-19.7 GHz (space-to-Earth) by geostationary fixed-satellite service systems and by feeder links for non-geostationary-satellite systems in the mobile-satellite service is subject to the application of the provisions of No. **9.11A**, but not subject to the provisions of No. **22.2**. The use of this band for other non-geostationary fixed-satellite service systems, or for the cases indicated in Nos. **5.523C** and **5.523E**, is not subject to the provisions of No. **9.11A** and shall continue to be subject to Articles **9** (except No. **9.11A**) and **11** procedures, and to the provisions of No. **22.2**. (WRC-97)

5.523E No. **22.2** shall continue to apply in the bands 19.6-19.7 GHz and 29.4-29.5 GHz, between feeder links of non-geostationary mobile-satellite service networks and those fixed-satellite service networks for which complete Appendix **4** coordination information, or notification information, is considered as having been received by the Bureau by 21 November 1997. (WRC-97)

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* *Note by the Secretariat:* This Resolution was revised by WRC-07.

5.524 *Additional allocation:* in Afghanistan, Algeria, Saudi Arabia, Bahrain, Brunei Darussalam, Cameroon, China, Congo (Rep. of the), Costa Rica, Egypt, the United Arab Emirates, Gabon, Guatemala, Guinea, India, Iran (Islamic Republic of), Iraq, Israel, Japan, Jordan, Kuwait, Lebanon, Malaysia, Mali, Morocco, Mauritania, Nepal, Nigeria, Oman, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, the Dem. Rep. of the Congo, the Dem. People's Rep. of Korea, Singapore, Somalia, Sudan, South Sudan, Chad, Togo and Tunisia, the frequency band 19.7-21.2 GHz is also allocated to the fixed and mobile services on a primary basis. This additional use shall not impose any limitation on the power flux-density of space stations in the fixed-satellite service in the frequency band 19.7-21.2 GHz and of space stations in the mobile-satellite service in the frequency band 19.7-20.2 GHz where the allocation to the mobile-satellite service is on a primary basis in the latter frequency band. (WRC-15)

5.525 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.

5.526 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.

5.527 In the bands 19.7-20.2 GHz and 29.5-30 GHz, the provisions of No. **4.10** do not apply with respect to the mobile-satellite service.

5.527A The operation of earth stations in motion communicating with the FSS is subject to Resolution **156 (WRC-15)**. (WRC-15)

5.528 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. **5.524**.

5.530A Unless otherwise agreed between the administrations concerned, any station in the fixed or mobile services of an administration shall not produce a power flux-density in excess of −120.4 dB(W/(m2 · MHz)) at 3 m above the ground of any point of the territory of any other administration in Regions 1 and 3 for more than 20% of the time. In conducting the calculations, administrations should use the most recent version of Recommendation ITU-R P.452 (see also the most recent version of Recommendation ITU-R BO.1898). (WRC-15)

5.530B In the band 21.4-22 GHz, in order to facilitate the development of the broadcasting-satellite service, administrations in Regions 1 and 3 are encouraged not to deploy stations in the mobile service and are encouraged to limit the deployment of stations in the fixed service to point-to-point links. (WRC-12)

5.530D See Resolution 555 **(WRC-12)**. (WRC-12)

5.532 The use of the band 22.21-22.5 GHz by the Earth exploration-satellite (passive) and space research (passive) services shall not impose constraints upon the fixed and mobile, except aeronautical mobile, services.

5.532A The location of earth stations in the space research service shall maintain a separation distance of at least 54 km from the respective border(s) of neighbouring countries to protect the existing and future deployment of fixed and mobile services unless a shorter distance is otherwise agreed between the corresponding administrations. Nos. **9.17** and **9.18** do not apply. (WRC-12)

5.532B Use of the band 24.65-25.25 GHz in Region 1 and the band 24.65-24.75 GHz in Region 3 by the fixed-satellite service (Earth-to-space) is limited to earth stations using a minimum antenna diameter of 4.5 m. (WRC-12)

5.535A The use of the band 29.1-29.5 GHz (Earth-to-space) by the fixed-satellite service is limited to geostationary-satellite systems and feeder links to non-geostationary-satellite systems in the mobile-satellite service. Such

use is subject to the application of the provisions of No. **9.11A**, but not subject to the provisions of No. **22.2**, except as indicated in Nos. **5.523C** and **5.523E** where such use is not subject to the provisions of No. **9.11A** and shall continue to be subject to Articles **9** (except No. **9.11A**) and **11** procedures, and to the provisions of No. **22.2**. (WRC-97)

5.536 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.

5.536A Administrations operating earth stations in the Earth exploration-satellite service or the space research service shall not claim protection from stations in the fixed and mobile services operated by other administrations. In addition, earth stations in the Earth exploration-satellite service or in the space research service should be operated taking into account the most recent version of Recommendation ITU-R SA.1862. (WRC-12)

5.536B In Saudi Arabia, Austria, Bahrain, Belgium, Brazil, China, Korea (Rep. of), Denmark, Egypt, United Arab Emirates, Estonia, Finland, Hungary, India, Iran (Islamic Republic of), Ireland, Israel, Italy, Jordan, Kenya, Kuwait, Lebanon, Libya, Lithuania, Moldova, Norway, Oman, Uganda, Pakistan, the Philippines, Poland, Portugal, the Syrian Arab Republic, Dem. People's Rep. of Korea, Slovakia, the Czech Rep., Romania, the United Kingdom, Singapore, Sweden, Tanzania, Turkey, Viet Nam and Zimbabwe, earth stations operating in the Earth exploration-satellite service in the frequency band 25.5-27 GHz shall not claim protection from, or constrain the use and deployment of, stations of the fixed and mobile services. (WRC-15)

5.536C In Algeria, Saudi Arabia, Bahrain, Botswana, Brazil, Cameroon, Comoros, Cuba, Djibouti, Egypt, United Arab Emirates, Estonia, Finland, Iran (Islamic Republic of), Israel, Jordan, Kenya, Kuwait, Lithuania, Malaysia, Morocco, Nigeria, Oman, Qatar, Syrian Arab Republic, Somalia, Sudan, South Sudan, Tanzania, Tunisia, Uruguay, Zambia and Zimbabwe, earth stations operating in the space research service in the band 25.5-27 GHz shall not claim protection from, or constrain the use and deployment of, stations of the fixed and mobile services. (WRC-12)

5.538 *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. (WRC-07)

5.539 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.

5.540 *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.

5.541 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.

5.541A Feeder links of non-geostationary networks in the mobile-satellite service and geostationary networks in the fixed-satellite service operating in the band 29.1-29.5 GHz (Earth-to-space) shall employ uplink adaptive power control or other methods of fade compensation, such that the earth station transmissions shall be conducted at the power level required to meet the desired link performance while reducing the level of mutual interference between both networks. These methods shall apply to networks for which Appendix **4** coordination information is considered as having been received by the Bureau after 17 May 1996 and until they are changed by a future competent world radiocommunication conference. Administrations submitting Appendix **4** information for coordination before this date are encouraged to utilize these techniques to the extent practicable. (WRC-2000)

5.542 *Additional allocation:* in Algeria, Saudi Arabia, Bahrain, Brunei Darussalam, Cameroon, China, Congo (Rep. of the), Egypt, the United Arab Emirates, Eritrea, Ethiopia, Guinea, India, Iran (Islamic Republic of), Iraq, Japan, Jordan, Kuwait, Lebanon, Malaysia, Mali, Morocco, Mauritania, Nepal, Oman, Pakistan, Philippines, Qatar, the Syrian Arab Republic, the Dem. People's Rep. of Korea, Somalia, Sudan, South Sudan, Sri Lanka and Chad, the band 29.5-31 GHz is also allocated to the fixed and mobile services on a secondary basis. The power limits specified in Nos. **21.3** and **21.5** shall apply. (WRC-12)

5.543 The band 29.95-30 GHz may be used for space-to-space links in the Earth exploration-satellite service for telemetry, tracking, and control purposes, on a secondary basis.

5.543A In Bhutan, Cameroon, Korea (Rep. of), the Russian Federation, India, Indonesia, Iran (Islamic Republic of), Iraq, Japan, Kazakhstan, Malaysia, Maldives, Mongolia, Myanmar, Uzbekistan, Pakistan, the Philippines, Kyrgyzstan, the Dem. People's Rep. of Korea, Sudan, Sri Lanka, Thailand and Viet Nam, the allocation to the fixed service in the frequency band 31-31.3 GHz may also be used by systems using high altitude platform stations (HAPS) in the ground-to-HAPS direction. The use of the frequency band 31-31.3 GHz by systems using HAPS is limited to the territory of the countries listed above and shall not cause harmful interference to, nor claim protection from, other types of fixed-service systems, systems in the mobile service and systems operated under No. **5.545**. Furthermore, the development of these services shall not be constrained by HAPS. Systems using HAPS in the frequency band 31- 31.3 GHz shall not cause harmful interference to the radio astronomy service having a primary allocation in the frequency band 31.3-31.8 GHz, taking into account the protection criterion as given in the most recent version of Recommendation ITU-R RA.769. In order to ensure the protection of satellite passive services, the level of unwanted power density into a HAPS ground station antenna in the frequency band 31.3-31.8 GHz shall be limited to −106 dB(W/MHz) under clear-sky conditions, and may be increased up to −100 dB(W/MHz) under rainy conditions to mitigate fading due to rain, provided the effective impact on the passive satellite does not exceed the impact under clear-sky conditions. See Resolution **145 (Rev.WRC-12)**. (WRC-15)

5.544 In the band 31-31.3 GHz the power flux-density limits specified in Article **21**, Table **21-4** shall apply to the space research service.

5.546 *Different category of service:* in Saudi Arabia, Armenia, Azerbaijan, Belarus, Egypt, the United Arab Emirates, Spain, Estonia, the Russian Federation, Georgia, Hungary, Iran (Islamic Republic of), Israel, Jordan, Lebanon, Moldova, Mongolia, Oman, Uzbekistan, Poland, the Syrian Arab Republic, Kyrgyzstan, Romania, the United Kingdom, South Africa, Tajikistan, Turkmenistan and Turkey, the allocation of the band 31.5-31.8 GHz to the fixed and mobile, except aeronautical mobile, services is on a primary basis (see No. **5.33**). (WRC-12)

5.547 The bands 31.8-33.4 GHz, 37-40 GHz, 40.5-43.5 GHz, 51.4-52.6 GHz, 55.78-59 GHz and 64-66 GHz are available for high-density applications in the fixed service (see Resolution **75 (WRC-2000)***). Administrations should take this into account when considering regulatory provisions in relation to these bands. Because of the potential deployment of high-density applications in the fixed-satellite service in the bands 39.5-40 GHz and 40.5-42 GHz (see No. **5.516B**), administrations should further take into account potential constraints to high-density applications in the fixed service, as appropriate. (WRC-07)

5.547A Administrations should take practical measures to minimize the potential interference between stations in the fixed service and airborne stations in the radionavigation service in the 31.8-33.4 GHz band, taking into account the operational needs of the airborne radar systems. (WRC-2000)

5.548 In designing systems for the inter-satellite service in the band 32.3-33 GHz, for the radionavigation service 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**). (WRC-03)

5.549 *Additional allocation:* in Saudi Arabia, Bahrain, Bangladesh, Egypt, the United Arab Emirates, Gabon, Indonesia, Iran (Islamic Republic of), Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malaysia, Mali, Morocco, Mauritania, Nepal, Nigeria, Oman, Pakistan, the Philippines, Qatar, the Syrian Arab Republic, the Dem. Rep. of the Congo, Singapore, Somalia, Sudan, South Sudan, Sri Lanka, Togo, Tunisia and Yemen, the band 33.4-36 GHz is also allocated to the fixed and mobile services on a primary basis. (WRC-12)

5.549A In the band 35.5-36.0 GHz, the mean power flux-density at the Earth's surface, generated by any spaceborne sensor in the Earth exploration-satellite service (active) or space research service (active), for any angle greater than 0.8° from the beam centre shall not exceed −73.3 dB(W/m^2) in this band. (WRC-03)

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* *Note by the Secretariat:* This Resolution was revised by WRC-12.

5.550A For sharing of the band 36-37 GHz between the Earth exploration-satellite (passive) service and the fixed and mobile services, Resolution **752 (WRC-07)** shall apply. (WRC-07)

5.551H The equivalent power flux-density (epfd) produced in the band 42.5-43.5 GHz by all space stations in any non-geostationary-satellite system in the fixed-satellite service (space-to-Earth), or in the broadcasting-satellite service operating in the 42-42.5 GHz band, shall not exceed the following values at the site of any radio astronomy station for more than 2% of the time:

−230 dB(W/m^2) in 1 GHz and −246 dB(W/m^2) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a single-dish telescope; and

−209 dB(W/m^2) in any 500 kHz of the 42.5-43.5 GHz at the site of any radio astronomy station registered as a very long baseline interferometry station.

These epfd values shall be evaluated using the methodology given in Recommendation ITU-R S.1586-1 and the reference antenna pattern and the maximum gain of an antenna in the radio astronomy service given in Recommendation ITU-R RA.1631-0 and shall apply over the whole sky and for elevation angles higher than the minimum operating angle θ_{min} of the radiotelescope (for which a default value of 5° should be adopted in the absence of notified information).

These values shall apply at any radio astronomy station that either:

– was in operation prior to 5 July 2003 and has been notified to the Bureau before 4 January 2004; or

– was notified before the date of receipt of the complete Appendix **4** information for coordination or notification, as appropriate, for the space station to which the limits apply.

Other radio astronomy stations notified after these dates may seek an agreement with administrations that have authorized the space stations. In Region 2, Resolution **743 (WRC-03)** shall apply. The limits in this footnote may be exceeded at the site of a radio astronomy station of any country whose administration so agreed. (WRC-07)

5.551I The power flux-density in the band 42.5-43.5 GHz produced by any geostationary space station in the fixed-satellite service (space-to-Earth), or the broadcasting-satellite service operating in the 42-42.5 GHz band, shall not exceed the following values at the site of any radio astronomy station:

–137 dB(W/m^2) in 1 GHz and –153 dB(W/m^2) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a single-dish telescope; and

–116 dB(W/m^2) in any 500 kHz of the 42.5-43.5 GHz band at the site of any radio astronomy station registered as a very long baseline interferometry station.

These values shall apply at the site of any radio astronomy station that either:

– was in operation prior to 5 July 2003 and has been notified to the Bureau before 4 January 2004; or

– was notified before the date of receipt of the complete Appendix **4** information for coordination or notification, as appropriate, for the space station to which the limits apply.

Other radio astronomy stations notified after these dates may seek an agreement with administrations that have authorized the space stations. In Region 2, Resolution **743 (WRC-03)** shall apply. The limits in this footnote may be exceeded at the site of a radio astronomy station of any country whose administration so agreed. (WRC-15)

5.552 The allocation of the spectrum for the fixed-satellite service in the bands 42.5-43.5 GHz and 47.2-50.2 GHz for Earth-to-space transmission is greater than that in the band 37.5-39.5 GHz for space-to-Earth transmission in order to accommodate feeder links to broadcasting satellites. Administrations are urged to take all practicable steps to reserve the band 47.2-49.2 GHz for feeder links for the broadcasting-satellite service operating in the band 40.5-42.5 GHz.

5.552A The allocation to the fixed service in the bands 47.2-47.5 GHz and 47.9-48.2 GHz is designated for use by high altitude platform stations. The use of the bands 47.2-47.5 GHz and 47.9-48.2 GHz is subject to the provisions of Resolution **122 (Rev.WRC-07)**. (WRC-07)

5.553 In the bands 43.5-47 GHz and 66-71 GHz, stations in the land mobile service may be operated subject to not causing harmful interference to the space radiocommunication services to which these bands are allocated (see No. **5.43**). (WRC-2000)

5.554 In the bands 43.5-47 GHz, 66-71 GHz, 95-100 GHz, 123-130 GHz, 191.8-200 GHz and 252-265 GHz, satellite links connecting land stations at specified fixed points are also authorized when used in conjunction with the mobile-satellite service or the radionavigation-satellite service. (WRC-2000)

5.554A The use of the bands 47.5-47.9 GHz, 48.2-48.54 GHz and 49.44-50.2 GHz by the fixed-satellite service (space-to-Earth) is limited to geostationary satellites. (WRC-03)

5.555 *Additional allocation:* the band 48.94-49.04 GHz is also allocated to the radio astronomy service on a primary basis. (WRC-2000)

5.555B The power flux-density in the band 48.94-49.04 GHz produced by any geostationary space station in the fixed-satellite service (space-to-Earth) operating in the bands 48.2-48.54 GHz and 49.44-50.2 GHz shall not exceed –151.8 dB(W/m^2) in any 500 kHz band at the site of any radio astronomy station. (WRC-03)

5.556 In the bands 51.4-54.25 GHz, 58.2-59 GHz and 64-65 GHz, radio astronomy observations may be carried out under national arrangements. (WRC-2000)

5.556A Use of the bands 54.25-56.9 GHz, 57-58.2 GHz and 59-59.3 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density at all altitudes from 0 km to 1 000 km above the Earth's surface produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, shall not exceed –147 dB(W/(m^2 . 100 MHz)) for all angles of arrival. (WRC-97)

5.557A In the band 55.78-56.26 GHz, in order to protect stations in the Earth exploration-satellite service (passive), the maximum power density delivered by a transmitter to the antenna of a fixed service station is limited to –26 dB(W/MHz). (WRC-2000)

5.558 In the bands 55.78-58.2 GHz, 59-64 GHz, 66-71 GHz, 122.25-123 GHz, 130-134 GHz, 167-174.8 GHz and 191.8-200 GHz, stations in the aeronautical mobile service may be operated subject to not causing harmful interference to the inter-satellite service (see No. **5.43**). (WRC-2000)

5.558A Use of the band 56.9-57 GHz by inter-satellite systems is limited to links between satellites in geostationary-satellite orbit and to transmissions from non-geostationary satellites in high-Earth orbit to those in low-Earth orbit. For links between satellites in the geostationary-satellite orbit, the single entry power flux-density at all altitudes from 0 km to 1 000 km above the Earth's surface, for all conditions and for all methods of modulation, shall not exceed –147 dB(W/(m^2 . 100 MHz)) for all angles of arrival. (WRC-97)

5.559 In the band 59-64 GHz, airborne radars in the radiolocation service may be operated subject to not causing harmful interference to the inter-satellite service (see No. **5.43**). (WRC-2000)

5.559B The use of the frequency band 77.5-78 GHz by the radiolocation service shall be limited to short-range radar for ground-based applications, including automotive radars. The technical characteristics of these radars are provided in the most recent version of Recommendation ITU-R M.2057. The provisions of No. **4.10** do not apply. (WRC-15)

5.560 In the band 78-79 GHz radars located on space stations may be operated on a primary basis in the Earth exploration-satellite service and in the space research service.

5.561 In the band 74-76 GHz, stations in the fixed, mobile and broadcasting services shall not cause harmful interference to stations of the fixed-satellite service or stations of the broadcasting-satellite service operating in accordance with the decisions of the appropriate frequency assignment planning conference for the broadcasting-satellite service. (WRC-2000)

5.561A The 81-81.5 GHz band is also allocated to the amateur and amateur-satellite services on a secondary basis. (WRC-2000)

5.562 The use of the band 94-94.1 GHz by the Earth exploration-satellite (active) and space research (active) services is limited to spaceborne cloud radars. (WRC-97)

5.562A In the bands 94-94.1 GHz and 130-134 GHz, transmissions from space stations of the Earth exploration-satellite service (active) that are directed into the main beam of a radio astronomy antenna have the potential to damage some radio astronomy receivers. Space agencies operating the transmitters and the radio astronomy stations concerned should mutually plan their operations so as to avoid such occurrences to the maximum extent possible. (WRC-2000)

5.562B In the bands 105-109.5 GHz, 111.8-114.25 GHz, 155.5-158.5 GHz and 217-226 GHz, the use of this allocation is limited to space-based radio astronomy only. (WRC-2000)

5.562C Use of the band 116-122.25 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, at all altitudes from 0 km to 1 000 km above the Earth's surface and in the vicinity of all geostationary orbital positions occupied by passive sensors, shall not exceed –148 dB(W/(m^2 · MHz)) for all angles of arrival. (WRC-2000)

5.562E The allocation to the Earth exploration-satellite service (active) is limited to the band 133.5-134 GHz. (WRC-2000)

5.562F In the band 155.5-158.5 GHz, the allocation to the Earth exploration-satellite (passive) and space research (passive) services shall terminate on 1 January 2018. (WRC-2000)

5.562G The date of entry into force of the allocation to the fixed and mobile services in the band 155.5-158.5 GHz shall be 1 January 2018. (WRC-2000)

5.562H Use of the bands 174.8-182 GHz and 185-190 GHz by the inter-satellite service is limited to satellites in the geostationary-satellite orbit. The single-entry power flux-density produced by a station in the inter-satellite service, for all conditions and for all methods of modulation, at all altitudes from 0 to 1 000 km above the Earth's surface and in the vicinity of all geostationary orbital positions occupied by passive sensors, shall not exceed –144 dB(W/(m^2 · MHz)) for all angles of arrival. (WRC-2000)

5.563A In the bands 200-209 GHz, 235-238 GHz, 250-252 GHz and 265-275 GHz, ground-based passive atmospheric sensing is carried out to monitor atmospheric constituents. (WRC-2000)

5.563B The band 237.9-238 GHz is also allocated to the Earth exploration-satellite service (active) and the space research service (active) for spaceborne cloud radars only. (WRC-2000)

5.565 The following frequency bands in the range 275-1 000 GHz are identified for use by administrations for passive service applications:

– radio astronomy service: 275-323 GHz, 327-371 GHz, 388-424 GHz, 426-442 GHz, 453-510 GHz, 623-711 GHz, 795-909 GHz and 926-945 GHz;

– Earth exploration-satellite service (passive) and space research service (passive): 275-286 GHz, 296-306 GHz, 313-356 GHz, 361-365 GHz, 369-392 GHz, 397-399 GHz, 409-411 GHz, 416-434 GHz, 439-467 GHz, 477-502 GHz, 523-527 GHz, 538-581 GHz, 611-630 GHz, 634-654 GHz, 657-692 GHz, 713-718 GHz, 729-733 GHz, 750-754 GHz, 771-776 GHz, 823-846 GHz, 850-854 GHz, 857-862 GHz, 866-882 GHz, 905-928 GHz, 951-956 GHz, 968-973 GHz and 985-990 GHz.

The use of the range 275-1 000 GHz by the passive services does not preclude use of this range by active services. Administrations wishing to make frequencies in the 275-1 000 GHz range available for active service applications are urged to take all practicable steps to protect these passive services from harmful interference until the date when the Table of Frequency Allocations is established in the above-mentioned 275-1 000 GHz frequency range.

All frequencies in the range 1 000-3 000 GHz may be used by both active and passive services. (WRC-12)

الملحق رقم 3 الحواشي الوطنية

BHR1: One or all of the services mentioned in column 2 is allocated on a national basis in Bahrain. Stations of such national services shall not cause harmful interference to stations of a service of administrations operating in accordance with Article 5 of the ITU Radio Regulations.

أحدى أو جميع الخدمات المذكورة في العمود الثاني على أساس وطني في مملكة البحرين. ويجب ألا تسبب محطات هذه الخدمات الوطنية تداخلا ضارا لمحطات خدمة الدول المجاورة العاملة وفقا للمادة 5 من لوائح الراديو للاتحاد.

BHR2: This band or part of it is used by the Amateur service on a primary or secondary basis in accordance with Amateur regulation in Bahrain.

يستخدم هذا النطاق الترددي أو جزء منه لخدمة هواة اللاسلكي على أساس أولي أو ثانوي وفقا للوائح تنظيم هذه الخدمة في مملكة البحرين.

BHR3: This band or part of it is used by Point to Point Fixed Link in accordance with Fixed Wireless Point to Point Regulation (FLR) / Policy in Bahrain.

يستخدم هذا النطاق الترددي أو جزء منه لتطبيقات الوصلات الثابتة من نقطة إلى نقطة وفقا للوائح / سياسة الوصلات الثابتة في مملكة البحرين.

BHR4: This band or part of it is used by the Short Range Devices (SRD) on a secondary basis in accordance with SRD regulation in Bahrain.

يستخدم هذا النطاق الترددي أو جزء منه لتطبيقات الأجهزة قصيرة المدى (SRD) على أساس ثانوي وفقا للوائح تنظيم هذه الخدمة في مملكة البحرين.

قرار استغناء

قرار رقم (١١٣- غ) لسنة ٢٠١٧
بشأن قرار استملاك رقم (٨٢) لسنة ٢٠١١

إن وزارة الأشغال وشئون البلديات والتخطيط العمراني بناءً على الصلاحيات المخولة لها بموجب القانون رقم (٣٩) لسنة ٢٠٠٩ بشأن استملاك العقارات للمنفعة العامة قد قررت إلغاء قرار الاستملاك رقم (٨٢) لسنة ٢٠١١ الصادر على ملك السادة/ محمد جعفر حسن وشركاه، الكائن في توبلي من المنامة والمسجل بالمقدمة رقم ١٩٧٦/٦٢٤٤، وذلك من أجل مشروع توبلي الإسكاني، وذلك كون العقار موقوف للإمام الحسين، حسب طلب وزارة الإسكان.

وعملاً بأحكام القانون المشار إليه يعتبر هذا الإعلان إشعاراً رسمياً للمالك وعلى المالك الاتصال بوزارة الأشغال وشئون البلديات والتخطيط العمراني (شئون البلديات) بناية مدينة الذهب للاطلاع على كافة التفاصيل المتعلقة بالموضوع.

وزير الأشغال وشئون البلديات والتخطيط العمراني
عصام بن عبدالله خلف

إعلانات مركز المستثمرين

إعلان رقم (٥٩٦) لسنة ٢٠١٧
بشأن تحويل مؤسسة فردية
إلى شركة ذات مسئولية محدودة

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدم إليه السيد/ أحمد فيصل حسن العلوي، مالك المؤسسة الفردية التي تحمل اسم (المختبر الحيوي)، المسجلة بموجب القيد رقم ٩١١٥٤-٢، طالباً تغيير الشكل القانوني للمؤسسة وذلك بتحويلها إلى شركة ذات مسئولية محدودة، وبرأسمال مقداره ٥،٠٠٠ (خمسة آلاف) دينار بحريني، وتصبح الشركة مملوكة لكل من شركة (أومكس القابضه ذ.م.م)، والسيد/ أحمد فيصل حسن العلوي.

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٥٩٧) لسنة ٢٠١٧
بشأن تحويل شركة الشخص الواحد
إلى شركة تضامن

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدم إليه السيد/ علي عادل عيسى، مالك شركة الشخص الواحدالتي تحمل اسم (لوساكا للمقاولات ش.ش.و)، المسجلة بموجب القيد رقم ٩٦١٦٥، طالباً تغيير الشكل القانوني للشركة وذلك بتحويلها إلى شركة تضامن، وبرأسمال مقداره ٥٠،٠٠٠ (خمسون ألف) دينار بحريني وذلك بعد تنازله عن ملكية الشركة لكل من : السيد/ مختار عباس عبدالله العلي، والسيد/ عبدالله بن سعد بن خليل العيد.

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٥٩٨) لسنة ٢٠١٧
بشأن تحويل شركة الشخص الواحد
إلى شركة ذات مسئولية محدودة

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدم إليه السيد/ رامز محمد بن عجمان العواضي، مالك شركة الشخص الواحد التي تحمل اسم (جناتك للتمور ش.ش.و)، المسجلة بموجب القيد رقم ١٠٢١١٨-١، طالباً تغيير الشكل القانوني للشركة وذلك بتحويلها إلى شركة ذات مسئولية محدودة، وبرأسمال مقداره ٤٠،٠٠٠,٠٠٠ (أربعون ألف) دينار بحريني، وتكون مملوكة لكل من: السيد/ محمد رامز محمد العواضي، البحريني الجنسية، والسيد/ حسين أحمد قائد العواضي، البحريني الجنسية.

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة

للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٥٩٩) لسنة ٢٠١٧
بشأن تحويل مؤسسة فردية
إلى شركة ذات مسئولية محدودة

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدم إليه السيد/ مازن عبدالحميد عبدالرزاق عبدالقادر شريف، مالك المؤسسة الفردية التي تحمل اسم (أنتاير للمقاولات)، المسجلة بموجب القيد رقم ٧٠٩٣٠، طالباً تغيير الشكل القانوني للمؤسسة وذلك بتحويلها إلى شركة ذات مسئولية محدودة، وبرأسمال مقداره ٢٠،٠٠٠ (عشرون ألف) دينار بحرينى، ويصبح اسمها التجاري (أنتاير للمقاولات ذ.م.م)، وتكون مملوكة لكل من: السيد/ مازن عبدالحميد عبدالرزاق عبدالقادر شريف، والسيد/ شيبو فيليب.

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٦٠٠) لسنة ٢٠١٧
بشأن تحويل مؤسسة فردية
إلى شركة ذات مسئولية محدودة

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدم إليه الشيخ محمد بن عبدالعزيز بن محمد آل خليفة مالك المؤسسة الفردية التي تحمل اسم (البوم للتجارة)، المسجلة بموجب القيد رقم ٩٤٣٨٨، طالباً تغيير الشكل القانوني للمؤسسة وذلك بتحويلها إلى شركة ذات مسئولية محدودة، وبرأسمال مقداره ٢٠،٠٠٠ (عشرون ألف) دينار بحريني، وتصبح مملوكة لكل من: الشيخ محمد بن عبدالعزيز بن محمد آل خليفة، البحريني الجنسية، والسيد/ Madathi Parambil Kochakkan Thilakkan، الهندي الجنسية.

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٦٠١) لسنة ٢٠١٧
بشأن تحويل شركة الشخص الواحد
إلى شركة ذات مسئولية محدودة

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدم إليه السيد/ محمد سفيان عارف، مالك شركة الشخص الواحد التي تحمل اسم (لإلكو للإدارة ش.ش.و)، المسجلة بموجب القيد رقم ١٠٩٤٧٦-١، طالباً تغيير الشكل القانوني للشركة وذلك بتحويلها إلى شركة ذات مسئولية محدودة، وبرأسمال مقداره ٥٠٠ (خمسمائة) دينار بحريني، وتكون مملوكة لكل من السادة: محمد سفيان عارف عبد ربه، الأردني الجنسية، وحنين باسم أحمد رحمه الأردنية الجنسية، وعماد الدين محمد حسن الخطيب، الأردني الجنسية، ومحمد موسى عبدالله محمود، المصري الجنسية، وأشرف شكري أمين صلاح، الأردني الجنسية.

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة

للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٦٠٢) لسنة ٢٠١٧
بشأن تحويل مؤسسة فردية
إلى شركة ذات مسئولية محدودة

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدم إليه السيد/ علي محمد حسن شكرالله مالك المؤسسة الفردية التي تحمل اسم (ورشة الليالي الكهربائية)، المسجلة بموجب القيد رقم ١٥٨٩٣، طالباً تغيير الشكل القانوني للمؤسسة وذلك بتحويلها إلى شركة ذات مسئولية محدودة، وبرأسمال مقداره ٥،٠٠٠ (خمسة آلاف) دينار بحريني، وتكون مملوكة لكل من: السيد/ علي محمد حسن شكرالله، والسيد/ BALJIT SINGH.

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٦٠٣) لسنة ٢٠١٧
بشأن تحويل مؤسسة فردية
إلى شركة ذات مسئولية محدودة

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدمت إليه فاطمة صقير سيد أنور حسين شاه جراج، مالكة المؤسسة الفردية التي تحمل اسم (نقطة تاج للمقاولات)، المسجلة بموجب القيد رقم ٩٩١٧٥، طالبة تغيير الشكل القانوني للمؤسسة وذلك بتحويلها إلى شركة ذات مسئولية محدودة، وبرأسمال مقداره ١،٥٠٠ (ألف وخمسمائة) دينار بحريني، وإدخال السيد/ MOHMMED ASHRAF شريكاً في الشركة.

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٦٠٤) لسنة ٢٠١٧
بشأن تحويل شركة الشخص الواحد
إلى شركة ذات مسئولية محدودة

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدمت إليه فاطمة خليل إبراهيم مالكة شركة الشخص الواحد التي تحمل اسم (أعماق للمشاريع ش.ش.و)، المسجلة بموجب القيد رقم ٧٦٠٦٥، طالبة تغيير الشكل القانوني للشركة وذلك بتحويلها إلى شركة ذات مسئولية محدودة، وبرأسمال مقداره ٥٠،٠٠٠ (خمسون ألف) دينار بحريني، وذلك بعد تنازلها عن الشركة لصالح كل من السادة: إبراهيم خليل إبراهيم علي، وماري جين ألبور، وحسن خليل إبراهيم علي.

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة

للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٦٠٥) لسنة ٢٠١٧
بشأن تحويل مؤسسة فردية
إلى شركة ذات مسئولية محدودة

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدم إليه السيد/ حسين علي جاسم محمد الحسابي، مالك المؤسسة الفردية التي تحمل اسم (حسين الحسابي للمقاولات)، المسجلة بموجب القيد رقم ٩٨٢٧٢، طالباً تغيير الشكل القانوني للمؤسسة وذلك بتحويلها إلى شركة ذات مسئولية محدودة، وبرأسمال مقداره ٢،٥٠٠ (ألفين وخمسمائة) دينار بحريني، وتكون مملوكة لكل من: السيد/ حسين علي جاسم محمد الحسابي، والسيد/ جميل خليل إبراهيم علي ثامر.

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٦٠٦) لسنة ٢٠١٧
بشأن تحويل شركة الشخص الواحد
إلى شركة ذات مسئولية محدودة

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدم إليه السيد/ فاروق فتح الله محمد، مالك شركة الشخص الواحد التي تحمل اسم (سيراميك الخليج ش.ش.و)، المسجلة بموجب القيد رقم ٦٦٨٩١-١، طالباً تغيير الشكل القانوني للشركة وذلك بتحويلها إلى شركة ذات مسئولية محدودة، وبرأسمال مقداره ٥٠،٠٠٠ دينار (خمسون ألف) دينار بحريني، وتكون مملوكة لكل من: السيد/ فاروق فتح الله محمد فتح الله، البحريني الجنسية، والسيد/ MOHAMMAD MUSTAFA CHALIL ، الهندي الجنسية.

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٦٠٧) لسنة ٢٠١٧
بشأن تحويل شركة ذات مسئولية محدودة
إلى شركة الشخص الواحد

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدم إليه الشركاء في الشركة ذات المسئولية المحدودة التي تحمل اسم (ذي جلف جورميه جروب ذ.م.م)، المسجلة بموجب القيد رقم ٦٧٧٧٦، طالبين تخفيض رأسمال الشركة من ٩٤٠،٠٠٠ (تسعمائة وأربعين ألف) دينار بحريني إلى ١٠٠،٠٠٠ (مائة ألف) دينار بحريني، ومن ثم تحويلها إلى شركة الشخص الواحد، ويصبح اسمها التجاري (ذي جلف جورميه جروب ش.ش.و)، وتصبح مملوكه لشركة (بان أربين جورميت ذ.م.م).

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٦٠٨) لسنة ٢٠١٧
بشأن تحويل شركة ذات مسئولية محدودة
إلى شركة الشخص الواحد

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدم إليه الشركاء في الشركة ذات المسئولية المحدودة التي تحمل اسم (ذي جلف جورميه جروب ذ.م.م)، المسجلة بموجب القيد رقم ٦٧٧٧٦، طالبين تغيير الشكل القانوني للشركة وذلك بتحويلها إلى شركة الشخص الواحد، وبرأسمال مقداره ١٠٠،٠٠٠ (مائة ألف) دينار بحريني، ويصبح اسمها التجاري (ذي جلف جورميه جروب ش.ش.و) لمالكتها شركة (بان أربين جورميت ذ.م.م).

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٦٠٩) لسنة ٢٠١٧
بشأن تحويل مؤسسة فردية
إلى شركة ذات مسئولية محدودة

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدم إليه السيد/ وائل عبده حسبو محمد، مالك المؤسسة الفردية التي تحمل اسم (الأفق الذهبية الطبية)، المسجلة بموجب القيد رقم ٩٤٦٤٤، طالباً تغيير الشكل القانوني للمؤسسة وذلك بتحويلها إلى شركة ذات مسئولية محدودة، وبرأسمال مقداره ٥٠٠٠ (خمسة آلاف) دينار بحريني، وتكون مملوكة لكل من السادة/ وائل عبده حسبو محمد، وعادل محمد عبدالله زقزوق، وسماح محمد عبدالمنعم خليفة.

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

إعلان رقم (٦١٠) لسنة ٢٠١٧
بشأن تحويل فرع من مؤسسة فردية
إلى شركة ذات مسئولية محدودة

يعلن مركز البحرين للمستثمرين بوزارة الصناعة والتجارة والسياحة بأنه قد تقدم إليه السيد/ فهد حسين خادم غوري ركن الدين، مالك المؤسسة الفردية التي تحمل اسم (الأثاث التوقيع)، المسجلة بموجب القيد رقم ٩٣٦٣٦، طالباً تحويل الفرع الرابع من المؤسسة إلى شركة ذات مسئولية محدودة قائمة بذاتها، وبرأسمال مقداره ٥،٠٠٠ (خمسة آلاف) دينار بحريني، وتكون مملوكة لكل من: السيد/ فهد حسين خادم غوري ركن الدين، والسيد/ راشد حسين خادم غوري ركن الدين.

فعلى كل من لديه اعتراض التقدم باعتراضه إلى المركز المذكور، مشفوعاً بالمستندات المؤيِّدة والمبرِّرة للاعتراض خلال مدة أقصاها خمسة عشر يوم عمل من تاريخ نشر هذا الإعلان.

استدراك

يصحح قرار الاستملاك رقم (٢٦٤) لسنة ٢٠٠٦ المنشور في الجريدة الرسمية، الخاص باستملاك جزء من العقار المسجل باسم السيد/ عبدالله علي راشد فخرو، الكائن في جدحفص من المنامة حسب المقدمة رقم ٢٢٣٣/ ١٩٦٤، والمستملك من أجل مشروع السهلة الإسكاني، بحيث يكون القرار استملاك كلياً على العقار المذكور بدل الاستملاك الجزئي، وذلك حسب طلب وزارة الإسكان وفقاً لتوصية هيئة التثمين.

استدراك

يصحح قرار الاستملاك رقم (١١٠) لسنة ٢٠٠٦ المنشور في الجريدة الرسمية، الخاص باستملاك العقار المسجل باسم السادة/ ورثة السيد عبدالرحمن السيد يوسف الرفاعي، الكائن في عالي من المنامة حسب المقدمة رقم ٤١٦٤/ ١٩٩٥، والمستملك من أجل مشروع جنوبي سلماباد الإسكاني، بحيث يكون القرار باسم السادة/ فاطمة محمد سنان السنان وشركائها على نفس العقار المسجل بالمقدمة رقم ٤١٦٤/ ١٩٩٥.