

Guidelines for Private Mobile Radio Spectrum Licenses

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DEFINITIONS & ABBREVIATIONS

DMO	Direct Mode Operation
ECC:	European Communication Commission is an executive body of the European Union responsible for proposing legislation, implementing decisions, upholding the Union's treaties and day-to-day running of the EU
ETSI:	European Telecommunications Standards Institute is an independent, non-profit, standardization organization in the telecommunications industry (equipment makers and network operators) in Europe, with worldwide projection.
ERP:	Effective Radiated Power with respect to the half wave dipole antenna.
GCC Telecoms Bureau:	A telecommunications Bureau, which conducts the coordination of spectrum assignments between neighbouring GCC countries and engages in the process of resolving cross-border interference cases
ictQATAR:	Supreme Council of Information & Communication Technology is the regulator in Qatar established under Amiri decree Law No. 36 for 2004 and as further defined in Amiri decree Law No. 34 of 2006.
ITU-R:	International Telecommunication Union - Radio Communications Bureau is a part of ITU which involves in the global management of the radio-frequency spectrum and satellite orbits
PMR	Private Mobile Radio
PABX	Private Automated Branch Exchange
PBX	Private Branch Exchange
Technical schedule (1):	The part of the radio Spectrum license where the technical conditions for using the radio frequencies are defined.
Technical schedule (2):	The part of the radio spectrum license, through which parameters relating to station/link are provided to ictQATAR 10 working days prior to deployment of the station/link for area-based or light license categories.

Private mobile radio (PMR) systems are generally used to provide communication facilities for closed user groups and support specific features such as group call and push-to-talk. Many PMR systems allow DMO (Direct Mode Operation) in which terminals can communicate with one another directly when they are out of the coverage area of a network. PMR systems are designed for short call holding times as this enables a large number of users to be accommodated within a particular frequency allocation. It is not permitted for PMR systems to support radio to telephony calls through connection, for example, with the licensee's business PABX (Private Automated Branch Exchange) or PBX (Private Branch Exchange).

PMR licenses are issued for the following classifications, which are described in subsequent sections of the Guidelines:

- a) PMR - Frequency Assigned
 - i. Network
 - ii. Area
- b) PMR - Band Assigned

Annex A to these guidelines provides the templates of the licenses alongwith the specific terms and conditions and technical schedule(s).

Annex B to these guidelines provides the application processing procedure.

Annex C to these guidelines provides application form to be used for license applications, modifications, renewals or cancellations. The application form describes the information and any documents that need to be provided for the application to be processed.

1. SUMMARY OF THE LICENSEE'S RESPONSIBILITIES

Individual users do not require any certification but licensees have to ensure that the radio equipment is operated by authorised persons only and the users are aware of the conditions of use. Unauthorised persons must be prevented from obtaining access to the equipment. The communications are restricted to business use and the equipment has to be used on the specified frequencies.

Additionally licensees are responsible to ensure that:

- a) equipment is deployed and operated within the terms of the license.
- b) any change of location or change of technical parameter is notified to and agreed with ictQATAR prior to implementation.
- c) equipment is properly maintained in order that system continues to meet the parameter limits defined in the terms and conditions and the technical schedules.
- d) up to date records of the equipment, configuration and technical parameters are maintained. These shall be made available to ictQATAR for inspection on request.
- e) the license is renewed in a timely manner.

Please see Annex A for detailed terms and conditions.

2. PMR – FREQUENCY ASSIGNED LICENSE

This section provides information on the licensing considerations for the issuing of PMR Frequency assigned licenses which are available in two options:

- a) **Frequency Assigned Network:** This is a flexible license that authorises the use of a wide variety of different types of equipment, analogue or digital PMR, paging and data systems etc. The license allows the deployment of a single base station along with one or more handheld or mobile stations. Frequencies are assigned by ictQATAR on a first-come first-served basis and are not re-usable.
- b) **Frequency Assigned Area:** This license is available to those applicants who require to deploy a number of base stations / repeaters over a considerably large geographic area using re-usable list of frequencies. ictQATAR will issue a license provided that spectrum is available within the geographical area requested. The licensee is free to deploy radio equipment anywhere within the licensed geographical area provided they meet the applicable license conditions and only use / re-use those frequencies specifically identified in the license.

2.1 Eligibility criteria

Eligible persons who may apply for PMR Frequency Assigned licenses are:

- a) Organisations registered in Qatar which may require a PMR license to fulfil their internal communication needs
- b) Government ministries and government agencies for their internal communication.

Each application is considered on its merits and requirements, e.g. security, safety, quality of service and the area of coverage etc. The license fee structure for the categories of license may also influence the applicant's choice of the licensing option.

2.2 Technical details

For PMR Frequency Assigned Network license, the frequency/ies alongwith the technical parameters such as power and bandwidth are specified on the associated technical schedule (1) of the license. In addition to the onsite monitoring of

The assessment of the field strength values to determine how often the spectrum can be reused will be done using:

- a) methods and criteria described in ITU-R Recommendations P.1546¹ & P.1812-1²
- b) onsite monitoring

In the case of PMR – Frequency assigned Area licenses the licensees need to carefully plan their deployments as there may be potential for the interference into and from licensees operating in adjacent channels and adjacent areas. Whilst licensees can use up to the maximum ERP for their base stations specified in the technical schedule (1), they should also use good site engineering techniques to ensure adequate separation distances to minimise the risk of interference.

Area assigned licensees are required to provide ictQATAR the details of every station such as frequency and technical parameters as per the format provided in the technical schedule (2) at least 10 working days prior to its establishment.

¹ "Method for point-to-area predictions for terrestrial services in the frequency range 30 MHz to 3 000 MHz", ITU-R P.1546

² "A path-specific propagation prediction method for point-to-area terrestrial services in the VHF and UHF bands", ITU-R P.1812-1

The following frequency bands and technical parameters and standards are currently available for both options of the PMR frequency assigned licenses, however, further bands may be included in future subject to availability:

Table 1. PMR - Frequency Assigned technical details

	VHF		UHF	
Frequency bands	40 MHz 30-33.7MHz 33.7-37 MHz 37-40 MHz 40-47 MHz	150 MHz 146-153 MHz 160 MHz 156-165 MHz	360-380 MHz 410-430 MHz	450-470 MHz
Standards, references etc.	As required for Type Approval in Qatar, for example standards include: ETSI EN 300 296-2, EN 301 166-2, EN 300 086-2, EN 300 113-2, EN 300 390-2			
Maximum transmitter power	The maximum ERP for base stations is 50Watts for 25 kHz channel bandwidths, 25 Watts for 12.5 kHz channel bandwidths and 12.5 Watts for 6.25 kHz channel bandwidths. The maximum ERP for mobile stations is 15 Watts for any channel bandwidth.			
Power spectral density	The Area Assigned Licensee must operate the Radio Equipment with a power spectral density of not more than -116 dBm/12.5kHz at and beyond the geographical boundary(ies) specified in the license document.			

3. PMR – BAND ASSIGNED

This section provides information on the licensing considerations for the issuing of PMR Band Assigned licenses. The PMR Band Assigned license authorises use of a block of frequencies (band) which is allocated to an organisation on a national basis for the deployment of a large PMR network.

Applications are treated on a first come first served basis subject to the availability of suitable spectrum. The applicant must provide detailed and substantiated evidence in support of the amount of spectrum requested and the technical parameters of the planned system. This license also does not allow the provision of telecommunication services to general public unless a policy decision is made to open up the sector and an appropriate individual license in addition to the spectrum license is issued for carrying out such an activity.

In circumstances where a Band Assigned licensee is operating on channels adjacent to other licensees in the same geographical area they shall carefully plan their deployments and use good site engineering techniques such as those provided in ETSI ETR 053, and / or ensure adequate separation distances to minimise the risk of interference.

It must be clear that the spectrum licenses are issued to support the internal communications of large organisations including backhaul communication. The provision of public telecommunication services directly to end users is prohibited unless and until an individual or a class license is issued for the same. Economics and Licensing Department (Regulatory Authority) of ictQATAR may be consulted for further details in this regard.

3.1 Eligibility criteria

Eligible persons who may apply for a PMR Band Assigned license are:

- a) Organisations registered in Qatar which may require a PMR license to fulfil their internal communication needs
- b) Government ministries and government agencies for their internal communication.

Each application is considered on its merits and requirements, e.g. security, safety, quality of service, capacity etc. The applicant is required to:

- a) to demonstrate that it currently or potentially has a major demand for PMR spectrum
- b) to justify the need for nationwide block allocation and to demonstrate that it will efficiently use the assigned block on a national basis.
- c) to indicate where it is planning to deploy the network and what would be the estimated capacity requirements.
- d) to show that it has the competence to manage the assigned blocks / bands with due attention to efficient use of spectrum, avoidance of interference and the management of any cases of interference which may arise.

The license fee structure for the categories of license may also influence the applicant’s choice of the licensing option.

3.2 Technical details

The licensee may deploy radio equipment in any location using the frequency band assigned by ictQATAR, subject to the license terms & conditions and technical schedules, which include the parameters in the table below:

Table 2. PMR – Band Assigned - technical details

	VHF	UHF
Frequency bands	N/A	360-380 MHz 410-430 MHz 450-470 MHz
Standards, references etc.	As required for Type Approval in Qatar, for example standards include: ETSI EN 300 296-2, EN 301 166-2, EN 300 086-2, EN 300 113-2, EN 300 390-2	
Maximum transmitter power	The maximum ERP allowed within the band is 50 Watts	
Power spectral density	The Licensee must operate the Radio Equipment with a power spectral density of not more than -116 dBm/12.5kHz at and beyond the border of the State of Qatar.	

4. CALL SIGN FOR FIXED STATIONS

Call signs for fixed stations in the Private Mobile radio license category may be requested by the applicants/licensees. The five digit call signs are available within the range: A7A20 - A7Z99 except A7D20-A7D99 which is reserved for coast stations.

5. COORDINATION

In some cases the use of radio equipment has the potential to interfere with systems being used in another country. It might therefore be necessary for ictQATAR to undertake cross border coordination, through the GCC Telecoms Bureau, before a license can be issued in such cases.

6. NOTE ON APPLICABLE STANDARDS

PMR systems require type approval as defined by the ictQATAR Type Approval Guidelines for Radio Equipment and Telecommunications Terminal Equipment³, which define the applicable standards.

7. SPECTRUM FEES

Please see the “Schedule of Radio Spectrum Fees” available on ictQATAR’s website for details.

8. CONTACT DETAILS

For further queries, please contact:

Manager Spectrum Affairs,
Regulatory Authority,
The Supreme Council of Information & Communication Technology (ictQATAR)
P.O. Box 23264, Al Nassr Tower, Post Office Roundabout, Al Corniche,
Doha, Qatar
Fax: 44830630

³ http://www.ictqatar.qa/sites/default/files/documents/Type_Approval_Guidelines.pdf

ANNEX A: LICENSE TEMPLATES & TERMS & CONDITIONS



دولة قطر

State of Qatar

المجلس الأعلى للاتصالات و تكنولوجيا المعلومات

ictQATAR

Regulatory Authority

PMR Frequency Assigned Network License

The Supreme Council of Information and Communication Technology ("ictQATAR"), in exercising the powers conferred on it by Articles (3) and (4) of Decree Law No. (34) of 2006, grants to the Licensee specified, authorisation to keep, have possession of, install, maintain, work and use onsite Private Mobile Radio network comprising of a base station, along-with one or more handheld(s) and/or mobile station(s), at specified location and using specific frequencies assigned by ictQATAR as per the general terms and conditions for radio spectrum licensing, specific terms and conditions, special conditions (if any) and technical schedule (s) of this License.

License Number:

Licensee:

Address:

License Type:

Commencement and Termination Dates:

The License comes into effect on DD/MM/YY and subject to revocation or suspension, expires on DD/MM/YY unless renewed in accordance with the Regulations.

Signed:

On behalf of the Supreme Council of Information and Communication Technology ("ictQATAR")

Date:

Official Stamp

Specific Terms & Conditions

1. Radio equipment operation

1.1 Licensees shall ensure that the Radio Equipment

- (a) is not used to transmit music, broadcast programmes or obscene or offensive language
- (b) not used as a public address system
- (c) not used to send misleading messages

1.2 Licensees shall ensure that users are instructed:

- (a) To restrict communications to business use only
- (b) that on receipt of messages not connected with the business of the Licensee, the Licensee or any person using the Radio Equipment shall not:
 - (i) make known the contents of any such message, its origin or destination, its existence or the fact of its receipt to any person, except to a duly authorised government official, a person authorised by ictQATAR or in the course of legal proceedings or for the purpose of any report thereof
 - (ii) retain any copy or make any use of any such message, or allow it to be reproduced in writing, copied or made use of.

2. Technical conditions

- 2.1 The licensee shall comply with relevant international cross border coordination requirements which are specified / provided by ictQATAR.
- 2.2 The licensee shall use good site engineering techniques and / or ensure adequate separation distances to minimise the risk of interference.

3. Definitions

- 3.1 **ictQATAR:** The regulator in Qatar established under Amiri decree Law No. 36 for 2004 and as further defined in Amiri decree Law No. 34 of 2006.
- 3.2 **License:** The permission issued by the Board or the General Secretariat to an individual or class of individuals to own or operate a telecommunications network, provide telecommunications services, or use radio frequency spectrum and it does not constitute a contract or bilateral agreement.
- 3.3 **Licensee:** A person who holds a License pursuant to the provisions of the Telecom Law and the executive by-law.
- 3.4 **Public Address System:** Public Address System (PA System) is an electronic sound amplification and distribution system with a microphone, amplifier and loudspeakers, used to allow a person to address a large public.

Special Conditions

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Technical Schedule (1)

This schedule forms part of the PMR-Frequency Assigned Network License No. XXXX issued to XXXX, the Licensee on [Date].

BASE STATION

BASE STATION	
Base station location (Lat and Long)	
Site name /address	
Call sign / System ID	
frequency(ies)	
Channel bandwidth	
Transmitter power (e.r.p.) (W)	
Equipment manufacturer	
Equipment model	
Antenna height	
Antenna manufacturer	
Antenna model	



دولة قطر

State of Qatar

المجلس الأعلى للاتصالات و تكنولوجيا المعلومات

ictQATAR

Regulatory Authority

PMR Frequency Assigned Area License

The Supreme Council of Information and Communication Technology ("ictQATAR"), in exercising the powers conferred on it by Articles (3) and (4) of Decree Law No. (34) of 2006, grants to the Licensee specified, authorisation to keep, have possession of, install, maintain, work and use Private Mobile Radio network comprising of one or more base stations, repeater stations, mobile stations and handheld stations within the specified geographic area and using radio frequency/ies that may be reused within the area as per the general terms and conditions for radio spectrum licensing, specific terms and conditions, special conditions (if any) and technical schedule (s) of this License.

License Number:

Licensee:

Address:

License Type:

Commencement and Termination Dates:

The License comes into effect on DD/MM/YY and subject to revocation or suspension, expires on DD/MM/YY unless renewed in accordance with the Regulations.

Signed:

On behalf of the Supreme Council of Information and Communication Technology ("ictQATAR")

Date:

Official Stamp

Specific Terms And Conditions

1. Radio equipment operation

1.1 Licensees shall ensure that the Radio Equipment

- (a) is not used to transmit music, broadcast programmes or obscene or offensive language
- (b) not used as a public address system
- (c) not used to send misleading messages

1.2 Licensees shall ensure that users are instructed:

- (a) To restrict communications to business use only
- (b) that on receipt of messages not connected with the business of the Licensee, the Licensee or any person using the Radio Equipment shall not:
 - (i) make known the contents of any such message, its origin or destination, its existence or the fact of its receipt to any person, except to a duly authorised government official, a person authorised by ictQATAR or in the course of legal proceedings or for the purpose of any report thereof
 - (ii) retain any copy or make any use of any such message, or allow it to be reproduced in writing, copied or made use of.

2. Technical conditions

- 2.1 The licensee shall comply with relevant international cross border coordination requirements which are specified / provided by ictQATAR.
- 2.2 The licensee shall use good site engineering techniques and / or ensure adequate separation distances to minimise the risk of interference.

3. Definitions

- 3.1 **ictQATAR:** The regulator in Qatar established under Amiri decree Law No. 36 for 2004 and as further defined in Amiri decree Law No. 34 of 2006.
- 3.2 **License:** The permission issued by the Board or the General Secretariat to an individual or class of individuals to own or operate a telecommunications network, provide telecommunications services, or use radio frequency spectrum and it does not constitute a contract or bilateral agreement.
- 3.3 **Licensee:** A person who holds a License pursuant to the provisions of the Telecom Law and the executive by-law.
- 3.4 **Public Address System:** Public Address System (PA System) is an electronic sound amplification and distribution system with a microphone, amplifier and loudspeakers, used to allow a person to address a large public.

Special Conditions									
<p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p>									
Technical Schedule (1)									
<p>This schedule forms part of the PMR-Frequency Assigned Area License No. XXXX issued to XXXX, the Licensee on [Date].</p>									
Frequency (ies)									
Maximum power allowed									
Field intensity/Power Spectral Density at the edge of the area									
Geographic Area									
Northern limit:	Lat:		Long:		Western limit:	Lat:		Long:	
Southern limit:	Lat:		Long:		Eastern limit:	Lat:		Long:	
OR ⁴									
Centre point:	Lat:		Long:		Radius (kms)				

⁴ There is the option of defining the geographic area as a rectangle or a circle depending on which best fits.

Technical Schedule (2)

This schedule forms part of the PMR-Frequency Assigned Area License No. XXXX issued to XXXX, the Licensee on [Date].

BASE STATION / REPEATER STATION (For each station)	
Location (Lat and Long)	
Site name / address	
Frequency(ies)	
Channel bandwidth	
Transmitter power (e.r.p.)	
Equipment manufacturer	
Equipment model number	
Antenna height	
Antenna manufacturer	
Antenna model	
Antenna Gain	



دولة قطر

State of Qatar

المجلس الأعلى للاتصالات و تكنولوجيا المعلومات

ictQATAR

Regulatory Authority

PMR Frequency Band Assigned License

The Supreme Council of Information and Communication Technology ("ictQATAR"), in exercising the powers conferred on it by Articles (3) and (4) of Decree Law No. (34) of 2006, grants to the Licensee specified, authorisation to keep, have possession of, install, maintain, work and use Private Mobile Radio network comprising of one or more base stations, repeater stations, mobile stations and handheld stations using assigned frequency band anywhere within the state of Qatar as per the general terms and conditions for radio spectrum licensing, specific terms and conditions, special conditions (if any) and technical schedule (s) of this License.

License Number:

Licensee:

Address:

License Type:

Commencement and Termination Dates:

The License comes into effect on DD/MM/YY and subject to revocation or suspension, expires on DD/MM/YY unless renewed in accordance with the Regulations.

Signed:

On behalf of the Supreme Council of Information and Communication Technology ("ictQATAR")

Date:

Official Stamp

Specific Terms And Conditions

1. Radio equipment operation

1.1 Licensees shall ensure that the Radio Equipment

- (a) is not used to transmit music, broadcast programmes or obscene or offensive language
- (b) not used as a public address system
- (c) not used to send misleading messages

1.2 Licensees shall ensure that users are instructed:

- (a) To restrict communications to business use only
- (b) that on receipt of messages not connected with the business of the Licensee, the Licensee or any person using the Radio Equipment shall not:
 - (i) make known the contents of any such message, its origin or destination, its existence or the fact of its receipt to any person, except to a duly authorised government official, a person authorised by ictQATAR or in the course of legal proceedings or for the purpose of any report thereof
 - (ii) retain any copy or make any use of any such message, or allow it to be reproduced in writing, copied or made use of.

2. Technical conditions

- 2.1 The licensee shall comply with relevant international cross border coordination requirements which are specified / provided by ictQATAR.
- 2.2 The licensee shall use good site engineering techniques such as those provided in ETSI ETR 053, and / or ensure adequate separation distances to minimise the risk of interference.

3. Definitions

- 3.1 **Frequency Band:** a contiguous block of the radio spectrum which starts at a frequency and ends at another.
- 3.2 **ictQATAR:** The regulator in Qatar established under Amiri decree Law No. 36 for 2004 and as further defined in Amiri decree Law No. 34 of 2006.
- 3.3 **License:** The permission issued by the Board or the General Secretariat to an individual or class of individuals to own or operate a telecommunications network, provide telecommunications services, or use radio frequency spectrum and it does not constitute a contract or bilateral agreement.
- 3.4 **Licensee:** A person who holds a License pursuant to the provisions of the Telecom Law and the executive by-law.
- 3.5 **Public Address System:** Public Address System (PA System) is an electronic sound amplification and distribution system with a microphone, amplifier and loudspeakers, used to allow a person to address a large public.

Special Conditions

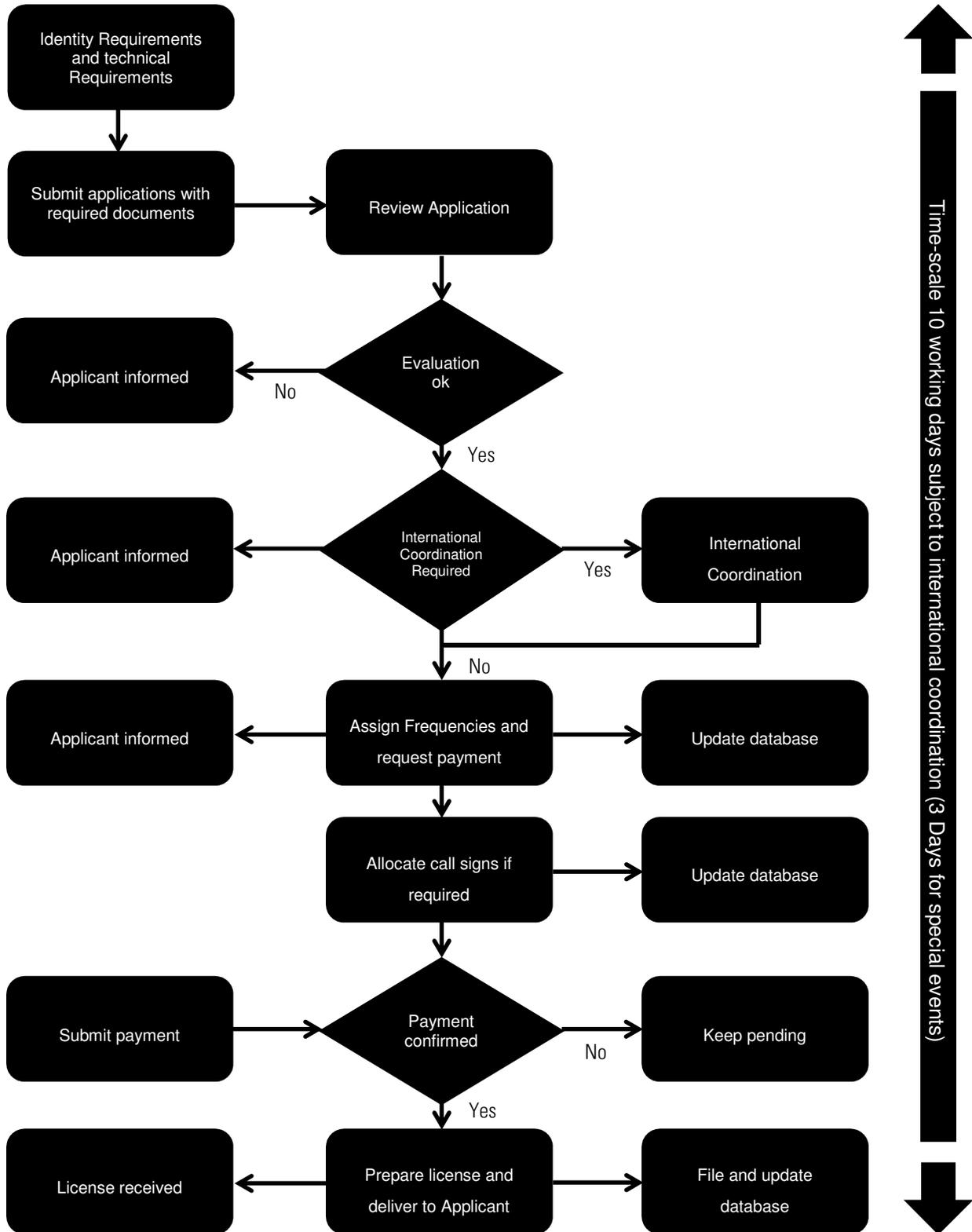
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Technical Schedule (1)

This schedule forms part of the PMR- Band Assigned License No. XXXX issued to XXXX, the Licensee on [Date]. .

Frequency Band	
Maximum power allowed	

ANNEX B: APPLICATION PROCESSING PROCEDURE



ANNEX C: APPLICATION FORM



ICTOATAR REGULATORY AUTHORITY
APPLICATION FOR PRIVATE MOBILE RADIO SPECTRUM LICENSES

FORM: SL/02

APPLICANT'S DECLARATION

1.1 I declare that:

- the information provided in this application is complete and correct;
- any equipment and / or radio spectrum licensed as a result of this application will be used in compliance with the applicable regulatory framework;
- I / we will notify ictQATAR of any changes to the information provided;
- I am authorized to sign this application on behalf of the applicant.

1.2 Name:

1.6 Company stamp (if applicable):

1.3 Position:

1.4 Signature:

1.5 Date:

APPLICANT INFORMATION

2.1 ictQATAR Customer Number:

Please note. If you have an existing customer number and have previously provided the following information you need only complete the Applicant Information sections if your details need to be amended in our records.

2.2 Name / Company / Organisation:

2.3 Nationality / Place of registration:

2.4 Profession:

2.5 PO Box:

2.6 Address:

2.7 Main contact:

2.10 Position:

2.8 Contact email:

2.11 Mobile Tel:

2.9 Office Tel:

2.12 Fax:

INVOICING INFORMATION (IF DIFFERENT FROM ABOVE)

3.1 Name / Company / Organisation:

3.2 PO Box:

3.3 Address:

3.4 Invoicing contact:

3.7 Position:

3.5 Contact email:

3.8 Mobile Tel:

3.6 Office Tel:

3.9 Fax:

APPLICATION TYPE (TICK AS APPROPRIATE)

New application:

Renewal:

Modification:

Cancellation:

APPLICATION SUBMISSION

Please send*
completed applications
to:

Regulatory Authority – Spectrum Affairs
The Supreme Council of Information & Communication Technology (ictQATAR)
P.O. Box 23264, Al Nassr Tower, Post Office Roundabout, Al Corniche,
Doha, Qatar

* by fax, post, courier
or hand deliver.

For Spectrum Planning Section:

Date Received:

Approved:

Not Approved:

License Number:

Staff No.

Remarks:

Date Completed:

For Spectrum Management Section:

Date Received:

Approved:

Not Approved:

License Number:

Staff No.

Remarks:

Date Completed:

PRIVATE MOBILE RADIO

1.1 Type of PMR license applied for:

PMR – Frequency assigned, Network

PMR – Frequency assigned, Area

PMR – Block assigned

PRIVATE MOBILE RADIO – FREQUENCY ASSIGNED NETWORK

2.1 Outline of requirement for a frequency-assigned PMR license:

2.2 Base station location(s):

Lat:

Long:

1

1

2

2

3

3

2.3 Site Address:

2.4 No. of equipment:

Base stations:

mobile stations:

Hand-helds:

(Repeat the following fields for each base station if details are not same)

2.5 Service area (radius from base station) (km)

2.6 Call sign /system ID*:

2.7 Antenna Type:

2.8 Antenna Power (e.r.p) (W)

2.9 Antenna Height:

2.10 Antenna gain

2.11 Azimuth of Maximum Radiation*:

2.12 Angular width of radiation main lobe*:

2.13 Band applied for - VHF:

40 MHz

30-33.7MHz

33.7-37 MHz

37-40 MHz

40-47 MHz

150 MHz

146-153 MHz

160 MHz

156-165 MHz

2.14 Band applied for - UHF:

360-380 MHz

410-430 MHz

450-470 MHz

2.15 Number of channels required:							
2.16 Channel bandwidth required:							
6.25 kHz		12.5 kHz		25 kHz			
Simplex		Duplex					
ADDITIONAL INFORMATION							

***Optional Field**

PRIVATE MOBILE RADIO – FREQUENCY ASSIGNED, AREA									
3.1 Outline of requirement for an area-based PMR license:									
3.2 No. of equipment (estimated):									
Base stations:		mobile stations:		Hand-helds:					
3.3 Area for which license is required:									
Centre point:		Lat:	Long:	Radius (kms)					
or									
Northern limit:	Lat:	Long:	Western limit:	Lat:	Long:				
Southern limit:	Lat:	Long:	Eastern limit:	Lat:	Long:				
3.4 Band applied for - VHF:									
40 MHz		30-33.7MHz		33.7-37 MHz		37-40 MHz		40-47 MHz	
150 MHz		146-153 MHz		160 MHz		156-165 MHz			
3.5 Band applied for - UHF:									
360-380 MHz		410-430 MHz		450-470 MHz					
3.6 Number of channels required:									
3.7 Channel bandwidth required:									
6.25 kHz		12.5 kHz		25 kHz					
Simplex		Duplex							
ADDITIONAL INFORMATION									

PRIVATE MOBILE RADIO – BAND ASSIGNED							
4.1 Outline of requirement for a band-assigned PMR license:							
4.2 Band applied for - UHF:							

360-380 MHz		410-430 MHz		450-470 MHz	
4.3 Bandwidth of the band required:					
4.4 Channel bandwidth to be used:					
6.25 kHz		12.5 kHz		25 kHz	
ADDITIONAL INFORMATION					

DOCUMENTS TO BE ENCLOSED	
Copy of CR / Copy of ID	
Copy of Corporate card	
Network Diagram	
Detailed Technical Specifications	
Antenna Radiation Pattern	
<p>For Area and block Licenses applicant is additionally required to provide justifications:</p> <ul style="list-style-type: none"> a) that it currently or potentially has a major demand for frequency spectrum b) that it has the competence to manage the assigned frequencies or blocks of spectrum on area / national basis respectively with due attention to efficient use of spectrum, avoidance of interference and the resolution of any cases of interference which may arise. 	
Note: Filled-in application form must be routed through MoFA for Foreign Missions & Embassies	

DOCUMENTS TO BE ENCLOSED (FOR CANCELLATION)	
Copy of receipt of final payment	
Original license	
Copy of the shipment document (Airway bill & packing list) or Declaration that equipment will be written-off under the supervision of ictQATAR staff	