

INVITATION FOR EXPRESSION OF INTEREST



هيئة تنظيم الاتصالات
Telecommunications Regulatory Authority

Invitation for Expression of Interest in 30 MHz of paired Radio Spectrum in the band 1710 MHz- 1880 MHz in the Kingdom of Bahrain

Issued by the Telecommunications Regulatory Authority

10 March 2010

Purpose: Information collected through this Expression of Interest exercise will be used by TRA in its analysis of the market demands for spectrum comprising 2x15 MHz in total, separated by 95 MHz, in the band 1710 MHz – 1880 MHz.

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1 Introduction

The Telecommunications Law of the Kingdom of Bahrain (issued through Legislative Decree No. 48 in October 2002) is the basic law that regulates telecommunications markets. The Law established the Telecommunications Regulatory Authority (“the Authority”) as an independent regulatory authority overseeing the telecommunications sector.

Section 3 of the Law describes the duties and powers of the Authority, including the promotion of effective and fair competition among new and existing licensed operators.

In 2009 the Authority conducted a spectrum consultation with a view to establishing a Telecommunications Spectrum Release Plan (TSRP) for the future. Due to on-going detailed discussions amongst governmental stakeholders, the Report and Statement concerning the Spectrum Consultation has yet to be published. However one area that the Authority wished to address in the TSRP is the spectrum that will be available in the Kingdom for future generations of International Mobile Telecommunications (IMT), which will likely follow the third generation mobile systems currently deployed.

The Authority is also aware that from time to time significant congestion occurs within currently deployed mobile networks. The Authority has therefore decided upon a strategy for the release of un-allocated spectrum in the band 1710 – 1880 MHz, which amounts to a total of 30 MHz. It is intended that this spectrum will be included in a future tender for public mobile system licences, which together with additional spectrum (yet to be decided) should be capable of facilitating advanced, post third generation mobile systems. Therefore the current planned release of un-allocated spectrum will be on a temporary basis only. However any temporary release of 1800 MHz spectrum will be conditional on licensees relinquishing their temporary usage once the future tender and licensing process commences.

The Authority therefore now invites parties to express their comments and interest in the temporary assignment of spectrum in the 1800 MHz band as described in detail in paragraph 2 below.

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2 The Spectrum on Offer

The spectrum available for temporary release will be available for a period of six months, extendable for further periods of two months duration. The available spectrum includes the following band segments, which have been packaged into three, 5 MHz Sub-Band lots:

	Sub-Band 1	Sub-Band 2	Sub-Band 3
Uplink	1750-1755 MHz	1755-1760 MHz	1780-1785 MHz
Downlink	1845-1850 MHz	1850-1855 MHz	1875-1880 MHz

2.1 Spectrum Fees

Once awarded, spectrum fees would be charged pro-rata using the current schedule of fees for the initial period of six months and thereafter every two months if the licence is extended.

2.2 Technical Considerations

Immediately adjacent to the low frequency side of Sub-Band 1 and the high frequency side of Sub-Band 2 there are existing GSM1800 networks operating within the Kingdom. Where necessary licensees will be required to liaise and agree with existing operators mechanisms for the use of the band edge frequency. This will also be required between users of Sub-Band 1 and 2 concerning the use of 1755 and 1850 MHz.

Concerning Sub-Band 3, there are several issues. With respect to the uplink spectrum potential licensees should be aware that within the adjacent spectrum separating uplink and downlink sub-bands e.g. 1785 – 1805 MHz, there is a licensed system using iBurst technology. Furthermore, in the band adjacent to the downlink e.g. 1880 – 1900 MHz DECT systems operate; DECT being a third generation IMT technology.

DECT technology in addition to providing residential and commercial cordless telecommunications can be used for local loop voice and data (WLL) provision. The Authority would not wish harmful interference to be caused to systems and services utilising the band 1880 – 1900 MHz, which may be incorporated into the light licensing regime, currently applicable at 2.45 and 5.8 GHz.

Studies in the European Regional Telecommunications Organisation (CEPT) have concluded that blocking of DECT receivers is the dominating interference mechanism. Furthermore, CEPT has determined that no guard band is required between the GSM1800 and DECT allocations, provided that DECT is able to properly detect GSM interference on the closest DECT carriers F9-F7 and escape to more distant carriers F6-F0 in the case of interference occurring.

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3 Expressions of Interest:

Expression of Interest should be submitted to TRA on or before 4.00 pm, 21 April 2011.
Respondents shall:

- Indicate the preferred frequency sub-band(s) in order of preference if more than one sub-band is of interest; and
- Provide reasons to support any preference expressed.

The Expression of Interest should include the registered business name and address of the respondent as well as a competent person who will act as a point of contact in the event of any queries.

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4 Next Steps

This invitation does not constitute an offer or invitation to participate in any award of the said spectrum, nor does it constitute the basis of any contract which may be concluded in relation to any bidding exercise or in respect of any assignment of spectrum. Further, this invitation does not represent any decision of the Authority. Those issues remain subject to consideration. This invitation should not be construed as indicating that the Authority has formed any opinion or decision on the said spectrum. This invitation shall not bind the Authority to assign any spectrum, or to grant any licence.

Information collected through this Expression of Interest exercise will be used by the Authority in its analysis and such analyses may be published in the future. Any confidential or commercially sensitive information should be clearly identified so that reasonable care can be taken when presenting the information contained in any future publication by the Authority. Individual Expressions of Interest or Objections submitted will not be disclosed to the public and the identities of the submitting parties/companies will also be kept confidential.

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5 Responses to this document

Responses are invited on the above proposals.

The address for responses to this document is:

The General Director,
Telecommunications Regulatory Authority (TRA),
P.O. Box 10353,
Manama,
Kingdom of Bahrain.

Alternatively, e-mail responses may be sent to the Authority's email address at consult_2011EOI@tra.org.bh

The deadline for responses is 4.00 p.m. on 21 April 2011.

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6 Glossary of Terms

CEPT	European Conference of Postal and Telecommunications Administrations
DECT	Digital Enhanced Cordless Telecommunications
GSM	Global System for Mobile
IMT	International Mobile Telecommunications
TSRP	Telecommunications Spectrum Release Plan
WLL	Wireless Local loop