E-BAND REGULATORY SUMMARY

E-band equipment operates in the 71-76GHz and 81-86GHz bands. This document examines the regulatory requirements that apply around the globe for operation in these bands (as of November 2012).

In March 2012, ITU-R Recommendation F.2006 was published covering this band. This is basically a direct copy of the CEPT ECC Recommendation (05)07.

Details of comparative license costs may be found in another document.

NORTH AMERICA

Canada: The basic approach in Canada is similar to that in the U.S. At present, Industry Canada is currently accepting license applications, which can be submitted for site-specific licenses on a non-standard basis. It is expected that RABC discussions on the SRSP/RSS standards for this band will begin soon.

Industry Canada stated that, once the RSS and SRSP have been developed, any system authorized under the interim licensing process will be required to meet all requirements set out therein. They also stated that a public consultation would be launched regarding the establishment of an appropriate spectrum license fee for use of the bands 71-76 GHz, 81-86 GHz and 92-95 GHz. Once a corresponding fee order has been established, licensees will be required to pay the annual spectrum license fees.

Until new fees are in place, licensees will continue to pay the current site-specific fees (based on capacity).

Mexico: The band was opened in March 2012.

U.S: In the U.S., access to this band is granted to a user after they have applied for and received a nationwide license that also covers the 92-95GHz band. After this, each link is coordinated on a first-come, first-served basis with no further FCC involvement. Comsearch perform this coordination process. Antenna and equipment specifications are detailed in FCC part 101 (sub-part Q). There are proposals being submitted by the FWCC to allow alternative antennas in this band, but the FCC has yet to decide upon this.

EUROPE

Within Europe, or to be more precise the 42 CEPT administrations, the situation regarding E-band usage is described in Recommendation ECC/REC(05)07. As a recommendation, this is not binding on member administrations but the first step in the harmonization process for spectrum usage. As a first step the situation in each member country is thus subject to change over time depending upon the nature of the starting situation. For example, military spectrum is less likely to be made available for commercial use than existing civilian spectrum.

Those countries that have implemented the decision in full and thus have the full bands open include Belgium, Croatia, Denmark, Estonia, France, Germany, Greece, Iceland, Ireland, Luxembourg, Montenegro, Netherlands, Portugal, Romania and Spain. While the U.K. has the full band open, it has its own regulation that does accommodate systems complying with the ECC Recommendation.

Those countries with no (civilian) access at all to this spectrum include Bulgaria, Sweden and Serbia.

Austria: Usage restricted to 73-76GHz and 83-86GHz as detailed in national interface specification FSB-RR071, otherwise follows ECC/REC(05)07.

Belgium: National interface specification RIS E29 applies in conjunction with ECC/REC(05)07.

Czech Republic: Usage restricted to 74-76GHz and 84-86GHz, as detailed in VO-R/23/05.2010-7, otherwise follows ECC/REC(05)07.

Denmark: Full band available as per ECC/REC(05)07 but no links had been licensed as of October 2012.

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France: ARCEP decisions 2010-1044 and 2010-1045 define usage in the entire band in accordance with ECC/REC(05)07.

Germany: National interface specification SSB FE-OE 023 applies in conjunction with ECC/REC(05)07.

Hungary: According to the EFIS database, usage is planned as denoted by National footnote H219A of the National Table of Frequency Allocations, which was published by Government Decree No. 346/2004 (XII.22.) Korm. H219A. On contacting the Hungarian regulator it was found that the full band will be available sometime in 2013 in line with ECC/REC(05)07.

Ireland: National interface specification ComReg 06/47R section 3.2 applies in conjunction with ECC/REC(05)07.

Latvia: Usage restricted to 74-76GHz and 84-86GHz, otherwise follows ECC/REC(05)07.

Poland: The sub bands 74-76GHz and 84-86GHz only are available for civilian use, otherwise follows ECC/REC(05)07.

Russia: The entire band is available to "service providers" on an unlicensed basis.

Slovenia: The sub bands 74-76GHz and 84-86GHz only, are available for civilian use, otherwise follows ECC/REC(05)07.

Spain: National interface specification IR-178 applies in conjunction with ECC/REC(05)07.

Switzerland: Usage defined in RIR0302-46, which specifies an allowable range between 71.125-75.875GHz and 81.125 -85-875GHz.

U.K: Usage in the U.K. is defined by Ofcom document OfW369. Although this document offers more flexibility than the ECC recommendation, it does encompass the ECC recommendation in a way that equipment designed to the recommendation can be fully utilized in the U.K. The licensing system used by Ofcom is a light licensed, self-coordinated, first-come-first-served basis with a register maintained by Ofcom. Currently license fees are £50 per link per year.

ASIA - PACIFIC

Australia: Self-coordinated use as defined in RALIFX20 governs usage of this band in Australia. In reality, usage of this band is on a similar basis to that in the U.K.

Japan: The Japanese regulator states that the band is available as per the ITU-R F.2006 recommendation. Use of the band is subject to license.

New Zealand: Channel plans accommodating 250MHz, 1250MHz, 1750MHz and 2250MHz channelization are detailed in PIB-22.

Singapore: Currently this band is not available in Singapore.

AFRICA

Kenya: The band is open with band plans following ITU-R F.2006.

Nigeria: The NCC (national regulator) web site indicates that there are no bands above 25GHz available at the present time for point-to-point operation.

South Africa: The band is open although to date only experimental licenses have been issued.

MIDDLE EAST

Bahrain: The TRA (national regulator) fixed link policy document states, "Until such time as changes to the NFP are considered during 2012 all frequency assignments in this band for licensees subject to the Telecommunications Law will be made on a case by case basis"

Oman: The band is available for use and the channel plan is aligned with the ECC/REC(05)07.

Saudi Arabia: According to the national frequency plan, 74-76GHz and 84-86GHz are available for civilian use.

UAE: The full band is available with channelizations of 250MHz.

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