Communications Regulatory Authority
State of Qatar

هيئة تنظيم الاتصالات
دولة قطر

CRA Feedback on the Responses Received for the Class License for Short Range Devices (SRD)

November 12, 2017

Spectrum Management Department
Communications Regulatory Authority (CRA)

Summary

- CRA published on July 16, 2017 a one-month Public Consultation on proposed modifications to the existing version (Version 2) of the Class License for SRDs and requested comments from interested parties.
- Deadline for receiving the comments was August 16, 2017.
- CRA received 14 comments from key stakeholders in RTTE Type Approval Industry, and they are summarized in the below table.
- The comments received from the Type Approval Agencies (like PCS, IB-Lenhardt AG) reflect the feedback of their customers mainly (automotive industry, WLAN equipment manufacturers, etc.).
- CRA feedback is summarized against these responses in the same table.

Table 1- Summary of comments received on the public consultation

Reference in the Document	Stakeholder Name	Comments Received	Response/ Remarks
General Comments about the modification of the Class License for Short Range Devices	Ooredoo Qatar	• Ooredoo respectfully suggests for the sake of clarity and transparency that the CRA should highlight in any consulted document any amendments, deletions and insertions or provide tracked change version of the original document. • They believe that if there are any other modifications, these must be consulted upon before the Class License is finalized. They also believe that the clarifications sought by stakeholders as part of this consultation process must be provided to such stakeholders and any further feedback sought before the Class License is finalized. •	Noted Noted
Non-Specific Short Range Devices (Page 14)	Ooredoo Qatar	• They note that the proposed Effective Radiated Radio Power (e.r.p) increases from 100mW to 500mW in the band 869.4 MHz—869.65 MHz, Ooredoo requests that the CRA indicate if this modification is motivated by an evolution of the standard or some other reason?	The e.i.r.p power has been changed to align with the ETSI standards and ECC/ERC recommendation.
M2M Applications (Page 14)		• Ooredoo states that it has no immediate requirements in the bands 863 MHz--867 MHz and 915 MHz—921 MHz for use for M2M applications in the unlicensed spectrum, however they seek clarification from CRA on its intentions behind the reservation of those frequencies for M2M applications.	The bands have been considered as candidate bands to facilitate M2M applications.

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<td>2.4 Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) Applications</td>
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Ooredoo supports and welcomes the CRA’s proposed inclusion of Band 1, 2 and 3 in the 5 GHz band, as the use of those bands are a pre-requisite for the rollout of next generation WiFi Tri-band CPE which has been intensively discussed with CRA.
With regards to the maximum output power that has been proposed by CRA, Ooredoo seeks that CRA should review the ETSI EN 301 893 (V1.8.1) standard and in case the proposed changes deviates from the above standard to provide the reason for such local requirements.

<table>
<tr><th>Band</th><th>CRA Maximum Output Power</th><th>Standard Maximum Output Power</th></tr>
<tr><td>5725 MHz-- 5875 MHz</td><td>e.i.r.p 100mW</td><td>e.i.r.p 200mW</td></tr>
<tr><td>5470 MHz – 5725 MHz</td><td>e.i.r.p 100mW</td><td>e.i.r.p 1000mW (with TPC)
e.i.r.p 500mW (without TPC)</td></tr>
</table>
</td>
<td>CRA consider systems with e.i.r.p power above 100mW under the light licensing regime.</td>
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<td>2.4 Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) Applications</td>
<td>Product Compliance Specialists (PCS) Ltd</td>
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Product Compliance Specialists approves and supports the notion to open more spectrum in the 5GHz bands for WLAN use. As it stands, Qatar currently has less 5GHz spectrum availability than 90% of all over countries globally. Opening the 5GHz bands 1, 2 and 3 would bring the Qatar NFAP for WLAN in to line with the European Union, United States and rest of the world.

</td>
<td>Noted</td>
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.2.4 Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) Applications	Panasonic Marketing Middle East & Africa FZE	• Panasonic Marketing suggests that if the EN 301 893(V2.1.1) standard is also specified in addition to the standard mention in page 20 (EN 301 893(V1.8.1)), it would be helpful to add this because they obtain this EN 301 893(V2.1.1) test report for/from European countries.	CRA will consider the most recent version of all the referred standards.
DECT (Page 15)		• They state that for the use of DECT phones (page 15) , the frequency range 1880 MHz -1900 MHz is allowed with a "Maximum Strength/ RF Output Power" termed as "Maximum Transmit Power of 10mW" , they suggest to change the power to be the same as the current e.i.r.p 10mW for Qatar.	CRA will retain the definition Maximum Transmit Power as per the ETSI standard.
Cordless Phones (Page 15)		• They suggest that for the use of cordless phones (page 15), the frequency range 2.4-2.4835 GHz is allowed with a "Maximum Strength/ RF Output Power" of 10mW, they ask to consider the increase of the output power to an e.i.r.p. of 100mW.	CRA will retain the e.i.r.p power as per the ETSI standard.
Transport and Traffic Telematics (Page 15)	IB-Lenhardt AG	• IB-Lenhardt suggests to add a regulation on the new 79 GHz frequency band for car radars. The band **77-81 GHz** / is allowed to operate up to a power of 55 dBm peak e.i.r.p., -3dBm / MHz mean e.i.r.p. / EN 304 489-1, EN 302 264. • They suggest to amend the below standard to the 76-77 GHz range, by correcting the ETSI standard from **EN 301 091** to **EN 301 091-1.** • They also suggest to correct the ETSI standard for the 24.05-24.25 GHz range, from **EN 302 858-1** to **EN 302 858** • Additionally they also recommend to add the 24.25-26.65 GHz range to the use of vehicle radars under the **EN 302 288 standard.**	CRA will consider the range 77-81 GHz for Automotive radar applications. CRA will consider the most recent version of all the referred standards. CRA will consider the range 24.05 GHz-24.25GHz only for Automotive radar applications.
2.4 Wireless Access Systems including Radio Local	Communications and Information network Association	• CIAJ & JEITA suggest to add another power limit under the 5725-5875 MHz range to cover the applicable ETSI EN 300 440 standard case.	CRA will consider the range 5.725 GHz -5.875 GHz with maximum e.i.r.p power of 25mW

Area Networks (WAS/RLANs) Applications	of Japan (CIAJ) & Japan Electronics And Information Technology Industries Association (JEITA)	<table><tr><td rowspan="2">5725 MHz-5875 MHz</td><td>e.i.r.p 100mW</td><td>EN 302 502 (V2.0.8)</td><td rowspan="2">Indoor use only</td></tr><tr><td>e.i.r.p 25mW</td><td>EN 300 440 (V2.1.1)</td></tr></table>	under the non-specific short range devices category.
M2M Applications (Page 14)	Wideminds Pte Ltd.	• Wideminds Pte. suggests that the range **915–921MHz** is not in use in Europe so for most manufacturers they will not prepare a report based on EN 300 220 -1, normally this is a band that America is using, as such they suggest that for this band FCC Standards to be added into the acceptable standards.	This falls under the standard EN 300 220-1 for M2M applications.
2.4 Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) Applications		• Similarly they state that for the frequency range 5725-5875 MHz, this Band 4 (WLAN) is only open for use in America, however it has not been open for use in Europe. So it is hard for manufacturers to provide EN 302 502. They question if it is possible to accept FCC standards for this band also?	CRA consider the ETSI standard EN 302 502.
2.4 Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) Applications	Airbus Operations GmbH	• Airbus Operations propose to give a definition and/or example of "Private Premises" to avoid misunderstandings or wrong interpretations of the term ("The operation of Wireless Access Systems is restricted within indoor private premises"). • Furthermore they would like to propose to enlarge the usage to include: - Business premises (e.g. offices, company facilities, etc.) - Commercial premises (Hotels, Shops, shopping malls, airports, etc.) and - The inside room of mobile assets like cars, busses, trains, ships and aircrafts.	The term "Private Premises" refers to residential and business premises.

Non-Specific Short Range Devices (Page 14)		• They stated that the EN standard EN 300228 is mentioned as a reference. According to their information, this standard is not existent and seems to be a Typo error.	Noted
2.4 Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) Applications	Intel Corporation	• Intel proposes to add **outdoor use** at 2400-2483.5 MHz & 5470-5725 MHz for Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) Applications. • They propose to change the maximum transmit power limit to 1W e.i.r.p for Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) Applications, • They recommend adding the new version of the Harmonized Standard at 5725-5875 MHz band for WLANs and align it with ETSI EN 302 502 V2.1.1 (2017-03), • They recommend adding the new version of the Harmonized Standard at 5150 MHz-5250 MHz and 5470 MHz-5725 MHz bands for WLANS and align it with ETSI EN 301 893 V2.1.1 (2017-05), • They recommend the **addition** of **57-66 GHz** for Multiple-Gigabit WAS/RLAN services. As IEEE based 802.11ad products (commercial name is WiGig) are already on the market. The relevant ETSI standard "ETSI EN 302 567 V2.1.1 (2017-07)" and also "ITU-R Recommendation "ITU-R M.2003" exist at (maximum power levels of (EIRP):40 dBm and Maximum spectral power density (EIRP): 13 dBm / MHz), • They recommend extending the allocation of 71 GHz (57-71 GHz) thereby enabling additional channels (capacity) for Multiple-Gigabit WAS/RLAN services . • Higher power as much as 82 dBm Avg. EIRP minus 2 dB for every dB that the antenna gain is below 51 dBi for outdoor point-to-point and point-to-multi point applications (Multiple-Gigabit WAS/RLAN services).	CRA consider systems with e.i.r.p power above 100mW under the light licensing regime. CRA will consider the most recent version of all the referred standards. CRA will consider the range 57-66 GHz used for MG WAS/RLAN services. CRA consider the range 66-71 GHz under the spectrum-licensing regime.

2.4 Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) Applications	Honeywell International Inc.	• Honeywell supports CRA's proposal regarding Wi-Fi in the 5GHz band and UHF RFID systems.	Noted.
2.4 Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) Applications	Cisco Systems	• Cisco states that in Annexure (2), section 2.4, the impression is given that Wireless Local Area Networks (WLAN) and Radio Local Area Networks (RLAN) are 2 different application types. In other regional jurisdictions, no distinction is made between WLAN and RLAN and hence we suggest to use the general term WAS/RLANs as used in the title of this clause for all entries in this table. • Also in Annexure (2), section 2.4, the 100mW e.i.r.p for 5470 – 5725MHz band (as well as 5725 – 5875MHz) is still a limit that departs from global practices based on the fact that Industry has no products supporting the 100mW for the abovementioned frequency bands as regulations elsewhere in the world support at least 200mW e.i.r.p. • With respect to the band 5470 – 5725 MHz, we would like the CRA to consider increasing the limit for RF Output Power to 1 W e.i.r.p. If the concern of the CRA is the coexistence with other SRDs (WAS/RLANs) in the same band, we would like the CRA to be aware that in the most recent (and published) version of EN 301 893 (version 2.1.1), the Adaptivity requirement has been completely revised to ensure coexistence between different WAS/RLAN using up to 1 W output power and all operating in the same frequency band and at the same location. • With respect to the band 5725 – 5875 MHz, we would like the CRA to consider increasing the	CRA consider WAS\RLAN for these applications. CRA consider systems with e.i.r.p power above 100mW under the light licensing regime. CRA will consider the most recent version of all the referred standards.

		limit for RF Output Power to at least 200 mW eirp. This would align with the power levels available in other countries and will allow manufacturers to deploy the same equipment type in multiple countries. • In Annexure (2), section 2.4, we would like to propose the regulation not to include version numbers of standards. These standards are developed by ETSI and are being revised continuously where later versions always include enhancements over previous versions. Therefore, we would like to propose the CRA whether a reference could be made to the list of harmonized standards published by the European Commission in the Official Journal of the EU. If this is not possible we would still propose to change the versions numbers as below: --- i. EN 300 328 v2.1.1 or later --- ii. EN 301 893 v2.1.1 or later --- iii. EN 302 502 v2.1.1 or later	
2M Applications (Page 14)	Silver Springs Networks Inc. (SSNI)	• SSNI urges CRA Qatar to go further and allow operation in the bands for M2M applications to allow their use for a wide range of applications from home automation and alarm systems as in Europe and the UAE and according to the full set of recommendations set out in Rec 70-03, which includes the following: -870-875.6MHz at 500mW and 2.5%/10% (for NRPs) - 870-875.8MHz at 25mW and 1% - RFID between 915-921MHz - 915.2-920.8 at 25mW and 1%	CRA consider the band 870-875.8 MHz with e.i.r.p up to 100mW for M2M applications. CRA do not consider the range 915-921 MHz for RFID applications.
2.4 Wireless Access Systems including Radio Local Area Networks (WAS/RLANs) Applications	iCDG Wireless Test & Certification Center (INTEL)	• iCDG believes that for the conditions related to the RLAN band 5470 MHz to 5725 MHz the e.i.r.p power should be 200 mW and that would be more appropriate than 100 mW for consistency with the 5.150 MHz to 5350 MHz band.	CRA consider systems with e.i.r.p power above 100mW under the light licensing regime.

M2M Applications (Page 14)	The Low Power Radio Association (LPRA)	• The LPRA urges CRA Qatar to make additional entries into the Class License to allow RFID, Home Automation, LPWAN/Networked SRDs and traffic and transport, as set out in CEPT recommendation 70-03 and available below: **Rec 70-03 annex** **Annex 1: Non-specific SRDs** h2.1: 25mW @1% 870-875.8 h3.1: 25mW @1% 915.2-920.8 & 100mW in four 400kHz channels **Annex 2:Tracking, tracing and data acquisition** c: 500mW with APC @2.5% (10% with NRPs) 870-875.6 **Annex 5: Transport and traffic telematics (TTT)** a: 500mW/100mW@0.1% 870-875.8MHz **Annex 10: RFID** h1: 10mW@25% 916.1-916.5 h2: 10mW@25% 917.3-917.7 h3: 10mW@25% 918.5-918.9 h4: 10mW@25% 919.7-920.1 **Annex 11: RFID** b: 4W ERP in four 400kHz channels	CRA consider the band 870-875.8 MHz to M2M applications. CRA do not consider the band 915-921 MHz for RFID band.
Transport and Traffic Telematics (Page 15)	Hella KGaA Hueck & Co.	• Hella KGaA Hueck suggests to maintain the full frequency range 24.05 GHz to 24.25 GHz to make available for automotive radars without time limitation and with a peak e.i.r.p of max 100mW (20 dBm) as implemented in nearly all countries of the world.	Noted

Transport and Traffic Telematics (Page 15)	CETECOM GmbH	• Cetecom proposes the inclusion of the Dedicated Short Range Services (DSRC) band. The automotive industry is gradually introducing Vehicle – to – Vehicle and Vehicle – to – Infrastructure communications. This is popularly known asV2X communication. The frequency band which had been reserved by the ITU and is being opened in several countries for this application is the 5.9GHz band (5850 – 5925MHz). They state that this range is currently allowed in Canada for On-Board use and USA for Road Side Use (RSU). • They propose that the industry testing standard applied here is ASTM E2213-03. The following test cases in this standard should be covered: - Output power - Conducted Transmitter spurious emissions - Radiated Transmitter Spurious emissions - Emission bandwidth - Transmit Spectrum Mask - Frequency Stability	The band 5850-5925 MHz is not covered under this Class license, as this frequency band is considered a licensed band and the use of the same is subject to a separate spectrum licensing process.
2.1 Radio Microphone applications (Page -17)	Internal comment	• Suggests that the highlighted frequency range 786 MHz-862 MHz in the paragraph on Page -17, is usually not allowed as it includes LTE uplink (832-862 MHz) and downlink (791-821 MHz).	CRA will consider the term under the Remarks column.