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**IEEE P802.18**  
**Radio Regulatory Technical Advisory Group (RR-TAG)**

Draft Liaison to China MIIT's consultation on its updated regulations  
of radio management on UWB equipment

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This document drafts a proposed liaison to the WTO notification issued by the Ministry of Industry and Information Technology (MIIT) of the People's Republic of China for its updated regulations of radio management of Ultra Wideband (UWB) equipment.

See

<https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/G/TBTN23/CHN1753.pdf&Open=True> and  
[https://docs.wto.org/dol2fe/Pages/FE\\_Search/ExportFile.aspx?id=297960&filename=2023/TBT/CHN/23\\_12098\\_00\\_x.pdf&Open=True](https://docs.wto.org/dol2fe/Pages/FE_Search/ExportFile.aspx?id=297960&filename=2023/TBT/CHN/23_12098_00_x.pdf&Open=True)

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5 Electronic filing

October 9, 2023

6  
7 Re: Notification on its updated radio management regulations on UWB

8  
9 Dear Telecommunications Bureau,

10  
11 IEEE 802 LAN/MAN Standards Committee (IEEE 802 LMSC) thanks the Ministry of Industry  
12 and Information Technology (MIIT) of the People’s Republic of China for issuing updated  
13 regulations of radio management on Ultra Wideband (UWB) equipment [1] following its  
14 consultation on the “Ultra Wideband (UWB) Equipment Radio Management Regulations (Draft  
15 for Comments)” in February 2023 (“the consultation”).

16  
17 IEEE 802 LMSC is a leading consensus-based open standards development committee for  
18 networking standards that are used by industry globally. It produces standards for networking  
19 devices, including wired and wireless local area networks (“LANs” and “WLANs”), wireless  
20 specialty networks (“WSNs”), wireless metropolitan area networks (“Wireless MANs”), and  
21 wireless regional area networks (“WRANs”). Technologies produced by implementers of our  
22 standards are a critical element for all networked applications today.

23  
24 IEEE 802 LMSC is a committee of the IEEE Standards Association and of Technical Activities,  
25 two of the Major Organizational Units of the IEEE. IEEE has about 400,000 members in over 160  
26 countries and its core purpose is to foster technological innovation and excellence for the benefit  
27 of humanity. IEEE is also a major accredited standards development organization whose standards  
28 are recognized world-wide. In submitting this document, IEEE 802 LMSC acknowledges and  
29 respects that other components of IEEE Organizational Units may have perspectives that differ  
30 from, or compete with, those of IEEE 802 LMSC. Therefore, this submission should not be  
31 construed as representing the views of IEEE as a whole<sup>1</sup>.

32  
33 Please find below the IEEE 802 LMSC’s specific comments on the updated radio management  
34 regulations.

35  
36 On 6 February 2023, IEEE 802 LMSC submitted its reply to the consultation. IEEE 802 LMSC  
37 appreciates that our comments on aligning the proposed spectral density mask with those in IEEE  
38 Std 802.15.4-2020 [2] have been taken into account and that the allocation has been widened to  
39 include the necessary roll-off for 500 MHz channels. Alignment with the spectral masks in the  
40 standard provides benefits in terms of availability of products, time to market, and international  
41 harmonization.

42  
43 However, IEEE 802 LMSC is surprised to find a new maximum value of 650 MHz for the 10 dB  
44 bandwidth in the proposed regulations. The 650 MHz value corresponds to the IEEE HRP spectral  
45 mask specification for systems nominally occupying 499.2 MHz 3 dB bandwidth [2]. This was  
46 also the specification IEEE 802 LMSC quoted in its response to the consultation.

47  
48 In this follow-up to our previous response, IEEE 802 LMSC would like to highlight that other  
49 3 dB bandwidths are part of the specification [2]. In particular, the HRP UWB PHY includes IEEE  
50 HRP UWB PHY channel 11 with a nominal 3 dB bandwidth of 1331.2 MHz centered on 7987.2  
51 MHz. Since wider bandwidth are required to support high-resolution sensing applications and

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<sup>1</sup> This document solely represents the views of IEEE 802 LMSC and does not necessarily represent a position of either the IEEE or the IEEE Standards Association.

52 high-accuracy ranging applications, bandwidths of over 500 MHz have been included in the  
53 specification. IEEE 802 LMSC would kindly like to ask MIIT to reconsider whether the 650 MHz  
54 maximum limit for the 10 dB bandwidth is required. As of now, no other regulatory regime for  
55 UWB contains an upper limit on the 10 dB bandwidth. The inclusion of such an upper limit may  
56 limit the capabilities of UWB equipment in utilizing the IEEE HRP UWB PHY channel 11 to  
57 support high-resolution sensing applications and high-accuracy ranging applications.  
58

## 59 Conclusion

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61 IEEE 802 LMSC thanks the MIIT for the opportunity to provide this submission and kindly  
62 requests MIIT to consider our request to abolish the 650 MHz maximum limit for the 10 dB  
63 bandwidth in its updated regulations on radio management of UWB equipment.  
64

65 Respectfully submitted,

66  
67 By: /s/.

68 Paul Nikolich

69 IEEE 802 LAN/MAN Standards Committee Chairman

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72 References:

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