



Wireless Communications Association International

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To: Norwegian Post and Telecommunications Authority

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Re: Comments on Consultation 2.6 GHz

The Wireless Communications Association International, Inc. (“WCA”) appreciates the opportunity to respond to the request by the Norwegian Post and Telecommunications Authority (“NPT”) for comment on certain issues relating to NPT’s band plan for and auction of spectrum in the 2500-2690 MHz (“2.6 GHz”) band.

WCA is the trade association of the wireless broadband industry; its membership includes a wide variety of wireless broadband system operators, equipment manufacturers and consultants interested in global deployment of broadband wireless access (“BWA”), whether it be fixed, portable or mobile. WCA is truly an international organization – it currently has nearly 230 members on six continents, including most of the BWA sector’s leading carriers and vendors. In addition to being BWA’s primary advocate in the United States, WCA actively assists in developing positions on spectrum policy before the International Telecommunications Union and other international fora. Most recently, through the efforts of its Global Development Committee, WCA has participated in proceedings before the European Commission (“EC”) and the national telecommunications regulatory authorities in the United Kingdom, Germany, Italy and Japan, each time endorsing a regulatory framework that promotes technological and service flexibility for BWA providers. WCA thus has a direct and immediate interest in NPT’s efforts to promote the allocation and use of spectrum for development of new wireless services in Norway.

WCA endorses Norway’s efforts to promote technological neutrality and service flexibility in the 2.6 GHz band. This approach permits the marketplace, not regulators, to determine how spectrum should be deployed to meet customer demand for new wireless services. As noted in the 2005 Report of the Wireless Broadband Access Task Force of the United States Federal Communications Commission (“FCC”), “a more flexible and market-oriented approach to spectrum policy is the better course to provide incentives for users to

migrate to more technologically innovative and efficient use of the spectrum, and to provide the services that markets determine are most valued, including broadband services.”¹

WCA is concerned, however, that NPT’s proposal to impose a spectrum cap on 2.6 GHz auction participants may undermine the full and efficient use of that band. Specifically, NPT’s current 2.6 GHz bandplan includes five unpaired 10 MHz frequency blocks between 2570-2620 MHz (designated as blocks B1, B2, B3, B4 and B5, respectively) in which operators may deploy systems using Time Division Duplex (“TDD”) technology. NPT suggests that it may impose a general cap of 30 MHz on frequency blocks B1-B5, such that no bidder could acquire more than three of those blocks in any single region.

WCA’s concern stems from the fact that operators who deploy TDD technology on the B-block frequencies already will be required to limit their operations to avoid interference to incompatible systems on adjacent spectrum. NPT notes that the bottom 5 MHz of each TDD-capable frequency block in the current 2.6 GHz bandplan “will have heavy restrictions on the level of radiated power,” and that this is equally true of the upper 5 MHz of block B5 (presumably to avoid interference to any incompatible system that may be operating on 2620-2625 MHz, which is the upper half of the paired C1 frequency block 2500-2505/2620-2625 MHz). Accordingly, if an auction participant acquires block B5 without acquiring block B4, all 10 MHz of block B5 will be subject to strong restrictions on power. If a bidder acquires blocks B4 and B5, it would be subject to significant power restrictions in the bottom 5 MHz of block B4 and the upper 5 MHz of block B5, again meaning that the bidder would lose 10 MHz of fully usable spectrum.

Accordingly, were NPT to limit bidders to a maximum of 30 MHz in the B-block frequencies, it would substantially increase the risk that auction participants will bid on blocks B1, B2 and B3 only (which would yield a maximum of 25 MHz of fully usable spectrum) and ignore blocks B4 and B5 altogether (which at most would yield only 10 MHz of fully usable spectrum, and may not be sufficient to sustain the new wireless services that bidders intend to deploy). This would leave blocks B4 and B5 stranded in the auction and thus underutilized for the foreseeable future. While WCA takes no position on the broader question of whether spectrum caps are necessary for the 2.6 GHz auction, any cap that produces this result is spectrally inefficient and should be avoided. WCA therefore submits that NPT can and should eliminate the problem by not applying any cap to blocks B1-B5. Under WCA’s proposal, even if

¹ See Report of the Wireless Broadband Access Task Force, Federal Communications Commission, GEN Docket No. 04-163, at 64 (Feb. 2005). These principles lay at the core of WCA’s 2002 proposal to overhaul the licensing and technical rules in the US for provision of wireless broadband service in the 2500-2690 MHz band. The FCC has adopted much of WCA’s proposal, and as a result wireless broadband operators now have an unprecedented opportunity to expedite deployments of 2.6 GHz wireless broadband service across the country without the burden of outdated or unnecessary regulation. Importantly, the FCC’s new regulatory framework for the 2.6 GHz band permits operators to deploy whatever technologies are dictated by consumer demand, subject only to whatever interference protection rules are necessary to ensure that operators deploying incompatible technologies are able to co-exist without disrupting each other’s services. See *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, Report and Order and Further Notice of Proposed Rulemaking, 19 FCC Rcd 14165 (2004); *Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, Order on Reconsideration and Fifth Memorandum Opinion and Order and Third Memorandum Opinion and Order and Second Report and Order, 21 FCC Rcd 5606, 5649 (2006).

a single bidder were to win all 50 MHz of the B-block frequencies, it would realize only a maximum of 40 MHz of fully usable B-group spectrum. On balance, WCA believes that the merits of greater utilization of blocks B4 and B5 will outweigh whatever marketplace benefits NPT believes will result from imposing a 30 MHz spectrum cap on B-block bidders.²

In sum, and subject to the caveats discussed above, WCA applauds NPT for its commitment to promoting development of new wireless services in the 2.6 GHz band. WCA looks forward to working with NPT to ensure that it achieves its objectives in this proceeding.

² NPT also requests comment on whether it should impose an 80 MHz spectrum cap on bidders for frequency blocks C1-C8, D1-D3 and E1-E3. It is unclear whether the 80 MHz cap would apply to the C, D and E-blocks exclusively, or whether it would also encompass any B-block spectrum that a winning C, D or E-block bidder acquires at the 2.6 GHz auction. If it is the latter and the 80 MHz cap is adopted, WCA recommends that NPT raise the cap to 90 MHz where those bidders for the C, D and E-block frequencies also win a license for any one of frequency blocks B1-B5. This adjustment is necessary to reflect the fact that each of the five B-blocks will be subject to substantial power restrictions under the current 2.6 GHz bandplan.