

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Third Generation Wireless Systems	)	ET Docket No. 00-258
	)	
Amendment of Section 2.106 of the Commission’s Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service	)	ET Docket No. 95-18
	)	
The Establishment of Policies and Service Rules for the Mobile-Satellite Service in the 2 GHz Band	)	IB Docket No. 99-81
	)	
Amendment of Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Band	)	IB Docket No. 01-185
	)	

To: The Commission

**COMMENTS OF ICO GLOBAL COMMUNICATIONS**

ICO Global Communications (Holdings) Ltd. (“ICO”)<sup>1</sup> submits these comments in response to the Public Notice<sup>2</sup> seeking comment on the National Telecommunications and Information Administration (“NTIA”) final report entitled *An Assessment of the Viability of*

---

<sup>1</sup> ICO is the parent company of ICO Satellite Services G.P., which is authorized to provide 2 GHz mobile satellite services in the United States. All comments filed in ET Docket Nos. 00-258 and 95-18 and IB Docket No. 99-81 will hereinafter be short cited.

<sup>2</sup> FCC Public Notice, *FCC Seeks Comment on the National Telecommunications and Information Administration’s Report “An Assessment of the Viability of Accommodating Advanced Mobile Wireless (3G) Systems in the 1710-1770 MHz and 2110-2170 MHz Bands,”* DA 02-1780 (July 24, 2002).

*Accommodating Advanced Mobile Wireless (3G) Systems in the 1710-1770 MHz and 2110-2170 MHz Bands* (“NTIA Report”).<sup>3</sup> The NTIA Report sets forth a reasonable plan for reallocating to advanced wireless services a total of 90 MHz of spectrum, consisting of 45 MHz in the 1710-1755 MHz band and a matching 45 MHz in the 2110-2170 MHz band.<sup>4</sup> The Commission, however, should reject any suggestion made by NTIA that the entire 2110-2170 MHz band should be reallocated for advanced wireless services or that the record supports the use of mobile satellite service (“MSS”) spectrum in the 1990-2025 MHz band as relocation spectrum for displaced multi-point distribution service (“MDS”) operations.<sup>5</sup> Any such proposal is inconsistent with the record developed in the above-captioned proceedings.

Specifically, NTIA suggests that “the entire 2110-2170 MHz band could be made available for 3G wireless systems in an acceptable timeframe.”<sup>6</sup> NTIA, however, fails to offer any compelling rationale for reallocating the entire 2110-2170 MHz band when it has been unable to identify more than 45 MHz of matching spectrum outside of the 1710-1755 MHz band for advanced wireless use on a paired basis (i.e., using different frequencies for upstream and downstream transmissions). The Commission has acknowledged that “the optimal use of the 1710-1755 MHz, 1755-1850 MHz, 2110-2150 MHz, 2160-2165 MHz, and 2500-2690 MHz bands for introducing advanced mobile and fixed services may be achieved by *pairing* these bands with one another or with other spectrum that has been identified for these services.”<sup>7</sup> In

---

<sup>3</sup> NTIA Report (July 23, 2002), available at <http://www.ntia.doc.gov/ntiahome/threeg/va7222002/3Gva072202web.htm>.

<sup>4</sup> *Id.* at 1-2.

<sup>5</sup> *See id.* at 22-23.

<sup>6</sup> *Id.* at 23.

<sup>7</sup> *See Amendment of Part 2 of the Commission’s Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Footnote continues...*

the absence of any evidence demonstrating the need for unpaired spectrum for advanced wireless use, there is simply no basis to support a reallocation of the 2110-2170 MHz band, particularly MSS spectrum at 2165-2170 MHz.<sup>8</sup> The Commission therefore should reallocate no more than a total of 45 MHz of spectrum within the 2110-2170 MHz band for advanced wireless use on a paired basis with the 1710-1755 MHz band.

Furthermore, ICO urges the Commission to dismiss suggestions in the NTIA Report that MSS spectrum in the 1990-2025 MHz band be used as an “alternative[] for relocation spectrum [for displaced MDS operations].”<sup>9</sup> Despite the recent proposal of BellSouth Corp. and other MDS proponents (collectively, “MDS Proponents”) to relocate MDS licensees from the 2150-2162 MHz band to the 1990-1996 MHz band,<sup>10</sup> the record developed in the above-captioned proceedings offers no basis to reallocate any portion of the 1990-2025 MHz band for use by displaced MDS licensees.<sup>11</sup>

Specifically, the MDS Proponents offer to relinquish use of the 2150-2162 MHz band in order to facilitate a reallocation of the larger 2110-2170 MHz band for advanced wireless

---

*Systems*, Notice of Proposed Rule Making and Order, 16 FCC Rcd 596, 622 ¶ 66 (2001) (“3G NPRM”) (emphasis added).

<sup>8</sup> Although proponents of time division duplex (“TDD”) systems, which use spectrum on an unpaired basis, have proposed the reallocation of certain frequencies for advanced wireless use on an unpaired basis, none appears to have suggested that the 2110-2170 MHz band would be suitable for unpaired operation. For example, Cingular proposed a reallocation of only the 1915-1925 MHz and 2010-2025 MHz bands for unpaired TDD operation. *See* Comments of Cingular Wireless LLC at 11-13 (Oct. 22, 2001). Similarly, Siemens and Orange Group proposed a reallocation of the 1910-1920 MHz band for unpaired TDD operation. *See* Comments of Siemens Corp. at 2 (Oct. 22, 2001); Comments of Orange Group at 3 (Oct. 20, 2001). In addition, Ericsson suggested that the 1910-1930 MHz and 2385-2400 MHz bands “could be suitable for...unpaired spectrum technologies.” *See* Comments of Ericsson at 7 (Oct. 19, 2001).

<sup>9</sup> NTIA Report at 23.

<sup>10</sup> *See* Letter from BellSouth Corp. *et al.* to Hon. Michael K. Powell, Chairman, FCC, ET Docket Nos. 00-258 & 95-18 & IB Docket No. 01-185 (July 11, 2002) (“BellSouth Letter”).

<sup>11</sup> On August 7, 2002, Nextel Communications, Inc. submitted reply comments in a separate proceeding, WT Docket No. 02-55, proposing a reallocation and licensing of the 1990-1995 MHz band for Nextel’s use. *See* Reply *Footnote continues...*

services. In exchange, new advanced wireless entrants would be required to pay the costs of relocating MDS incumbents to the 1910-1916 MHz and 1990-1996 MHz bands. This relocation would require a reallocation of the 1990-1996 MHz band, allocated domestically since 1997 and internationally since 1992 for MSS.

The MDS proposal is unnecessary, would wreak havoc on 2 GHz MSS systems that have been designed and constructed in reliance on existing service rules and technical requirements, and would further compromise the international allocation of the 1980-2010 MHz band to MSS. The MDS proposal is premised on the necessity of reallocating the entire 2150-2162 MHz band for advanced wireless services. As noted above, the results of the NTIA Report do not warrant a reallocation of more than 45 MHz of spectrum within the 2110-2170 MHz band. This spectrum is likely to come from the 2110-2150 MHz and 2160-2165 MHz bands, in view of the existing statutory requirement to reallocate the 2110-2150 MHz band<sup>12</sup> and the Commission's specific proposal to pair these bands with the 1710-1755 MHz band.<sup>13</sup> Thus, there is no apparent need to reallocate the entire 2150-2162 MHz band at this time or to relocate MDS licensees in that band to the 1990-1996 MHz band.

Moreover, the MDS Proponents mischaracterize their spectrum plan as a "win-win" solution that will have no adverse impact on any incumbent licensees. To the contrary, the MDS proposal will have a severe detrimental effect on the ICO system and other 2 GHz MSS systems that have been designed and constructed in reliance upon the Commission's 2 GHz MSS rules.

The MDS Proponents' purported "win-win" solution is based on the erroneous assertion that the

---

Comments of Nextel, WT Docket No. 02-55, at 8 (Aug. 7, 2002). ICO intends to file comments shortly opposing the Nextel proposal to the extent it proposes a reallocation of the 1990-1995 MHz band.

<sup>12</sup> See *3G NPRM* at 617 ¶ 50 (citing Balanced Budget Act of 1997, 111 Stat. 251 (1997)).

<sup>13</sup> *Id.* at 623 ¶ 67.

1990-1996 MHz band “has not yet been licensed for MSS” and “is likely to be orphaned and unavailable for MSS anyway, as it is paired with the 2165-2170 MHz MSS downlink band that the Commission has proposed to reallocate for 3G.”<sup>14</sup> Even assuming that the Commission decides to reallocate the 2165-2170 MHz band for advanced wireless services, it does not logically follow that the Commission also should reallocate the 1990-1996 MHz band.

In asserting their boldfaced claim that the 1990-1996 MHz band is likely to be unavailable for MSS, the MDS Proponents ignore the Commission’s 2 GHz MSS rules and licensing orders expressly authorizing licensees to use on a primary basis *any* 3.5 MHz of spectrum of their own choosing within the 1990-2025 MHz band.<sup>15</sup> The 2 GHz MSS rules further authorize licensees to aggregate their assigned frequencies through agreements to share use of those frequencies.<sup>16</sup> Thus, a reallocation of the 1990-1996 MHz band would deny 2 GHz MSS licensees their right to use those frequencies on a primary basis or pursuant to spectrum sharing agreements.

In addition, the Commission’s 2 GHz MSS rules do not require the 1990-1996 MHz band to be paired with MSS downlink frequencies at 2165-2170 MHz.<sup>17</sup> To the contrary, the 2 GHz MSS rules require 2 GHz MSS systems to be capable of operating without any pairing of frequencies between the 1990-2025 MHz uplink band and the 2165-2200 MHz downlink band.<sup>18</sup>

---

<sup>14</sup> BellSouth Letter at 3.

<sup>15</sup> See, e.g., *The Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band*, 15 FCC Rcd 16127, 16138 ¶ 16 (2000) (“2 GHz MSS Rules”); *ICO Services Limited*, 16 FCC Rcd 13762, 13774-75 ¶ 32 (IB/OET 2001).

<sup>16</sup> See *2 GHz MSS Rules* at 16140-41 ¶ 22.

<sup>17</sup> “Paired” operations, as used in the 2 GHz MSS rules, refer to MSS operations requiring a fixed amount of frequency separation between the uplink and downlink paths. Conversely, “unpaired” operations refer to MSS operations that do not require such fixed frequency separation, but rather are “capable of changing the frequencies used to operate between the uplink and the downlink [transmissions].” *Id.* at 16151 ¶ 54.

<sup>18</sup> See, e.g., *2 GHz MSS Rules* at 16151 ¶ 51.

The rules further require 2 GHz MSS systems to be capable of operating across at least 70 percent of the 1990-2025 MHz band.<sup>19</sup> In compliance with these requirements, ICO designed and constructed its system to operate within the 1985-2015 MHz and 2170-2200 MHz bands on an unpaired basis.<sup>20</sup> In fact, ICO successfully completed launch of its first satellite over a year ago. Because this satellite was built to operate within the previously designated frequency bands on an unpaired basis and has been successfully launched, it cannot be modified to accommodate any further changes to the existing frequency plan. A reallocation of the 1990-1996 MHz band thus would drastically limit the amount of spectrum available for ICO's uplink operations on a primary basis or pursuant to spectrum sharing agreements. Moreover, such a reallocation would cause the ICO system to be in non-compliance with the 70 percent frequency agility requirement and force ICO to modify its system at a prohibitive cost to bring it into regulatory compliance.

A reallocation of the 1990-1996 MHz band would further compromise the Commission's international spectrum harmonization efforts and deprive the public of the benefits of truly global MSS systems. The 1990-2010 MHz band is allocated for MSS both domestically and worldwide.<sup>21</sup> Acknowledging that "satellite systems operate most efficiently in a globally consistent allocation of contiguous spectrum,"<sup>22</sup> the Commission has attempted to ensure that its domestic 2 GHz MSS allocation is "as consistent as possible" with the international MSS

---

<sup>19</sup> *Id.*

<sup>20</sup> See ICO Letter of Intent at 15, File No. 188-SAT-LOI-97, IBFS File No. SAT-LOI-19970926-00163 (Sept. 26, 1997). Because the 1985-1990 MHz frequencies are not allocated for MSS domestically, the ICO system will not use these frequencies within the United States.

<sup>21</sup> See *2 GHz MSS Rules* at 16130 ¶ 3.

<sup>22</sup> *Allocation and Designation of Spectrum for Fixed-Satellite Services in the 37.5-38.5 GHz, 40.5-41.5 GHz and 48.2-50.2 GHz Frequency Bands*, Further Notice of Proposed Rule Making, 16 FCC Rcd 12244, 12248 ¶ 8 (2001).

allocations.<sup>23</sup> Reallocating the 1990-1996 MHz band would result in the availability of only 14 MHz of spectrum that could be used for 2 GHz MSS uplink operations both domestically and worldwide. This severely limited amount of spectrum is insufficient to support multiple, commercially viable 2 GHz MSS systems that can offer seamless global coverage.

In view of the substantial public interest harms that would result from a reallocation of the 1990-1996 MHz band, the Commission must reject the MDS proposal as an ill-considered attempt to favor MDS interests at the expense of the nascent 2 GHz MSS industry. Furthermore, consistent with the NTIA Report's plan to reallocate a total of 90 MHz of spectrum from the 1710-1755 MHz and 2110-2170 MHz bands for advanced wireless services, ICO urges the Commission to terminate further consideration of the 2 GHz MSS spectrum for future use by advanced wireless entrants or displaced incumbents.

Respectfully submitted,

/s/ Lawrence H. Williams

---

Lawrence H. Williams  
Suzanne Hutchings  
ICO GLOBAL COMMUNICATIONS  
(HOLDINGS) LTD.  
1730 Rhode Island Avenue, N.W.  
Suite 1000  
Washington, D.C. 20036

August 8, 2002

---

<sup>23</sup> *Amendment of Section 2.106 of the Commission's Rules to Allocate Spectrum at 2 GHz for Use by the Mobile-Satellite Service*, First Report and Order and Further Notice of Proposed Rule Making, 12 FCC Rcd 7388, 7395 ¶ 14 (1997).

## CERTIFICATE OF SERVICE

I, Theresa Pringleton, do hereby certify that I have on this 8th day of August 2002, had copies of the foregoing **COMMENTS OF ICO GLOBAL COMMUNICATIONS** delivered to the following via electronic mail:

Jamison Prime  
Office of Engineering and Technology  
Federal Communications Commission  
445 12th Street, SW, Room 4-A734  
Washington, D.C. 20554

Paul Margie, Spectrum & Int'l Legal  
Advisor  
Office of Commissioner Copps  
Federal Communications Commission  
445 12th Street, S.W., 8th Floor  
Washington, D.C. 20554

Peter A. Tenhula, Senior Legal Advisor  
Office of Chairman Powell  
Federal Communications Commission  
445 12th Street, S.W., 8<sup>th</sup> Floor  
Washington, D.C. 20554

James D. Schlichting, Deputy Chief  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W., 3<sup>rd</sup> Floor  
Washington, D.C. 20554

Bryan N. Tramont, Senior Legal Advisor  
Office of Commissioner Abernathy  
Federal Communications Commission  
445 12th Street, S.W., 8<sup>th</sup> Floor  
Washington, D.C. 20554

Thomas J. Sugrue, Chief  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12th Street, S.W., Room 3-C252  
Washington, D.C. 20554

Sam Feder, Spectrum & Int'l Legal Advisor  
Office of Commissioner Martin  
Federal Communications Commission  
445 12th Street, S.W., 8<sup>th</sup> Floor  
Washington, D.C. 20554

Thomas Tycz, Chief  
Satellite Division  
Federal Communications Commission  
445 12th Street, S.W., 6th Floor  
Washington, D.C. 20554

Charles Rush  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12th Street, S.W., 4th Floor  
Washington, D.C. 20554

Trey Hanbury  
Policy Division  
International Bureau  
Federal Communications Commission  
445 12th Street, S.W., Room 5-C313  
Washington, D.C. 20554

Kathleen Ham, Deputy Chief  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12th Street, SW, Room 3-C255  
Washington, D.C. 20554

Richard B. Engelman, Chief Engineer  
International Bureau  
Federal Communications Commission  
445 12th Street, S.W., Room 7-A760  
Washington, D.C. 20554

Linda Haller  
Associate Bureau Chief for Policy  
International Bureau  
445 12th Street, S.W., 6th Floor  
Washington, D.C. 20554

Donald Abelson, Bureau Chief  
International Bureau  
Federal Communications Commission  
445 12th Street, S.W., 6th Floor  
Washington, D.C. 20554

Cassandra Thomas, Deputy Chief  
Satellite Division  
International Bureau  
Federal Communications Commission  
445 12th Street, S.W., 6th Floor  
Washington, D.C. 20554

Breck Blalock, Deputy Chief  
Policy Division  
International Bureau  
Federal Communications Commission  
445 12th Street, S.W., 6th Floor  
Washington, D.C. 20554

Geraldine Matise, Deputy Chief  
Policy & Rules Division  
Office of Engineering and Technology  
Federal Communications Commission  
445 12th Street, S.W., Room 7-A123  
Washington, D.C. 20554

Tom Stanley, Chief Engineer  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12th Street, S.W., 4th Floor  
Washington, D.C. 20554

Barry Ohlson, Chief  
Policy Division  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12th Street, S.W., 4th Floor  
Washington, D.C. 20554

Julius Knapp, Deputy Chief  
Office of Engineering and Technology  
Federal Communications Commission  
445 12th Street, S.W., Room 7-A123  
Washington, D.C. 20554

Edmond J. Thomas, Chief  
Office of Engineering and Technology  
Federal Communications Commission  
445 12th Street, S.W., 7th Floor  
Washington, D.C. 20554

Bruce Franca, Deputy Chief  
Office of Engineering and Technology  
Federal Communications Commission  
445 12th Street, S.W., Room 7-A123  
Washington, D.C. 20554

Karl Kensinger, Special Advisor  
Satellite Division  
Federal Communications Commission  
445 12th Street, S.W., 6th Floor  
Washington, D.C. 20554

David Furth, Senior Legal Advisor  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12th Street, S.W., 4th Floor  
Washington, D.C. 20554

Scott Delacourt, Legal Advisor  
Wireless Telecommunications Bureau  
Federal Communications Commission  
445 12th Street, S.W., 4th Floor  
Washington, D.C. 20554

Michele Ellison, Deputy General Counsel  
Federal Communications Commission  
445 12th Street, S.W.  
Room 8-C757  
Washington, D.C. 20554

Jane Mago, General Counsel  
Federal Communications Commission  
445 12th Street, S.W.  
Room 8-C755  
Washington, D.C. 20554

James Ball, Chief  
Policy Division  
International Bureau  
Federal Communications Commission  
445 12th Street, S.W., 6th Floor  
Washington, D.C. 20554

Marilyn Simon  
Satellite Division  
International Bureau  
Federal Communications Commission  
445 12th Street, S.W., 6th Floor  
Washington, D.C. 20554

Doug Webbink, Chief Economist  
International Bureau  
Federal Communications Commission  
445 12th Street, S.W., 6th Floor  
Washington, D.C. 20554

Judy Herman, Assistant Division Chief  
Industry Analysis Division  
Media Bureau  
Federal Communications Commission  
445 12th Street, S.W.  
Room 1-C804  
Washington, D.C. 20554

Chris Murphy, Senior Legal Advisor  
International Bureau  
Federal Communications Commission  
445 12th Street, S.W., 6th Floor  
Washington, D.C. 20554

Howard Griboff  
Policy Branch, Satellite Division  
International Bureau  
Federal Communications Commission  
445 12th Street, S.W., 6th Floor  
Washington, D.C. 20554

Paul Locke  
Policy Division  
International Bureau  
Federal Communications Commission  
445 12th Street, S.W., 6th Floor  
Washington, D.C. 20554

/s/ Theresa Pringleton  
Theresa Pringleton