

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

<i>In the Matter of</i>)	
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)	
Modifications of Part 2 and 15 of the Commission's Rules for unlicensed devices and equipment approval)	ET Docket No. 03-201
)	
)	

COMMENTS OF CISCO SYSTEMS, INC.

CISCO SYSTEMS, INC.

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23 January 2004

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SUMMARY

Cisco Systems, Inc. (“Cisco”) supports the Commission’s continued efforts to promote the growth of broadband wireless networks by eliminating outdated regulations, and by liberalizing its rules to keep pace with new technologies. The proposals contained in this NPRM are another important step in that direction. Even good proposals, however, can be made better. Cisco believes that with some modifications to its proposals, the Commission can go even further towards removing regulatory roadblocks to the creation of efficient and inexpensive broadband networks across the country.

First, the Commission should abandon the unique antenna connector and integral antenna requirements. They are costly for manufacturers and consumers, and do nothing to protect against unlawful interference.

Second, in light of the Commission’s recent reform of its Part 15 rules to accommodate new digital technologies, it makes no sense have two sets of rules applying to identical devices operating in virtually identical spectrum. The Commission should align these rules, with the slight technical adjustments Cisco proposes, and should also fully align their spectrum allocations.

Third, the Commission should add a testing obligation to its proposed flexible equipment authorization proposal, and then should apply this new – and welcome – flexibility to manufacturers and well as network operators.

Fourth, the Commission’s proposed modular transmitter approval rules should be made even more flexible than the Commission proposes, and should be applied to devices approved under Part 2 as well as Part 15 of the rules.

Fifth, the Commission should adopt its proposal to grant routine authorizations to systems that use advanced antenna technologies and ensure that its rules enable the

widest range of technologies possible. The Commission should also take this opportunity to codify its classification of subscriber-to-hub links in a point-to-multipoint system.

Sixth, the Commission should adopt its proposals on lab accreditation intervals and electronic filing, and the proposal by HP to increase the limits on the number of devices that can be imported for testing, evaluation and demonstration purposes.

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COMMENTS OF CISCO SYSTEMS, INC.

Cisco appreciates this opportunity to participate in the Commission's ongoing efforts to improve its Part 15 rules for unlicensed devices. The latest Notice of Proposed Rulemaking is yet another step towards ensuring that the Commission's rules keep pace both with new technologies and the new markets they create. The Commission's proposals, if adopted, will permit the continued growth of wireless broadband networks that will benefit both consumers and industry.

BACKGROUND

Cisco is the worldwide leader in networking solutions for the Internet and is also a leading manufacturer of equipment for wireless services. Cisco offers a wide range of RF products that operate in "unlicensed" frequency bands. As such, Cisco understands the important role the Commission has played in creating an environment that allows the unlicensed bands to be widely shared, and that allows manufacturers to design and market advanced wireless devices in a reasonably cost-efficient manner. This proceeding provides the Commission an opportunity to do even more to promote the sharing of the unlicensed bands, and to reform its equipment authorization process to allow the benefits of advanced technology to reach the public ever more quickly and inexpensively.

DISCUSSION

This NPRM addresses a wide range of Part 15 issues, most of which have been raised in other contexts. But, as the Commission recognizes, it is best to tackle these issues in a rulemaking proceeding that can bring consistency and equity to the way they are handled.

Conceptually, the Commission's initiatives in this NPRM are sound. Some of the specific proposals, however, would benefit from some fine-tuning. In addition, this effort to modernize the Part 15 rules could be improved by a few additional rule changes. If adopted, the Commission's proposals, Cisco's suggested modifications of those proposals and its specific proposals for additional rules changes, would result in rules that benefit both industry and consumers, and also ease the Commission's administrative burdens.

I. THE UNIQUE ANTENNA CONNECTOR AND INTEGRAL ANTENNA REQUIREMENTS ARE INEFFECTUAL AND COSTLY AND OUGHT TO BE ABANDONED

The Commission proposes to make its current antenna replacement rules more flexible by requiring manufacturers to test transmitters only with the highest gain antenna they will use,¹ rather than with all antennas.² Cisco supports this proposal, which will eliminate a costly and unnecessary burden on manufacturers. However, the Commission can and should go further to ease its antenna-related rules by eliminating the unique antenna connector requirement of Section 15.203 and the integral antenna requirement that applies to Part 15 devices operating in the 5150-5250 MHz band.³

The unique connector requirement is designed to prevent consumers from attaching an antenna to a transmitter with which it has not been certified. The

¹ The obligation would apply to each "type" of antenna.

² NPRM at ¶17.

³ See Section 15.407(d).

Commission's concern is that the uncertified transmitter/antenna combination might create more interference than the rules allow. But few consumers have any interest in changing the antennas on a properly operating unlicensed device, or would be bold enough to ignore warnings against making such a change. There are also disincentives for making such unauthorized changes; tampering with a device is likely to void the manufacturer's warranty or render it inoperable. On the other hand, it has long been an open secret that the unique connector rule does not deter the determined – and technically competent – rule violator. Thus the unique connector rule has no impact on ordinary consumers, and does not deter those likely to want to modify their unlicensed devices. Its primary, though unintended, impact is to increase costs for manufacturers who must buy these expensive “one-off” connectors – and for the consumers who buy the devices.⁴

For many of the same reasons that the unique antenna connector rule is unnecessary and ineffectual, so too is the integral antenna requirement for 5150-5250 MHz U-NII devices. This requirement is one of several rules that were originally adopted to protect mobile-satellite service (“MSS”) feeder links⁵ operating in the 5150-5250 MHz band. The other rules require U-NII devices in this band to operate only at very low power and only indoors.

It is widely agreed that the power and indoor use restrictions are sufficient, without more, to protect MSS feeder links from U-NII devices. The integral antenna

⁴ There is also a practical difficulty with the existing rule. Once a “unique” connector is put on the market, it is purchased by many companies and soon is not “unique.” This leads to an never-ending circle, like a dog chasing its tail: as manufacturers buy a “unique” connector, it becomes common in the market, and is no longer “unique” – leading to a search for a new “unique” connector. The waste of economic resources this entails is enormous. A search for “connectors” on a large electronic parts company website will turn up more than 50,000 records. The Commission's rules have inadvertently played more than a small role in this waste.

⁵ A “feeder link” is not the link between a handset and a satellite, but rather is the link between a large earth station and the satellite. They are generally used to relay communications from the PSTN to the satellite, which then beams the communications on different frequencies to the mobile handsets.

rule, like the unique connector rule, was designed to ensure that consumers did not change antennas on their U-NII devices and cause unlawful interference. But, as with the unique connector rule, there is little reason for consumers to try to modify their U-NII devices in unlawful ways – and many reasons not to. Moreover, all the studies on the subject have shown that any interference into MSS feeder links from U-NII devices would be caused only from the aggregation of signals from a huge number of devices.⁶

This means that there would need to be a huge number of unlawful antennas attached to U-NII devices before they would contribute significantly to interference to MSS feeder links. It is simply not reasonable to believe that without the integral antenna rule large numbers of consumers would remove antennas from their U-NII devices and substitute antennas that would combine with the transmitters to create unlawful interference. In reality, the rule does nothing to protect MSS feeder links from interference from U-NII devices.

On the other hand, the integral rule destroys economies of scale that would otherwise be available to manufacturers of U-NII devices by eliminating many of the economies that might be realized by building a family of products that use common components and housings. As the Commission knows, there are a several 5 GHz sub-bands each with its own power limitations. But for the integral antenna rule, a manufacturer could build a single radio to operate in all of these bands, and simply screw in different antennas to achieve the proper power limitation, depending upon the sub-band in which it is intended to operate. Today, devices built for the 5150-5250 MHz band

⁶ Participants in the International Telecommunication Union’s work in this area suggest that up to tens of millions of devices must be “seen” by an MSS satellite before aggregate power flux density levels are high enough to cause a problem to the satellite. *See Conference Preparatory Meeting Report to the 2003 World Radiocommunication Conference* (Geneva 2003) at Section 2.3.1.2, footnote 6.

must be built separately – and thus much more expensively. These additional costs keep device prices higher than they need be for consumers, and thereby reduce demand. The integral antenna rule is both ineffectual and costly. It too should be eliminated.

The best way for the Commission to address its concerns about consumers making antenna changes to U-NII devices is to certify devices with the appropriate range of antennas, and require clear warnings against making inappropriate changes.

II. THE COMMISSION SHOULD ADOPT A SINGLE MEASUREMENT PROCEDURE FOR DIGITAL MODULATION SYSTEMS IN THE U-NII BAND

As the Commission pointed out in the NPRM, unlicensed digitally modulated systems can operate in the 5 GHz band either under the U-NII rules codified in Section 15.407 of Part 47, or under the spread spectrum rules codified in Section 15.247. The Commission noted that it had recently (and wisely) amended Section 15.247 to accommodate devices that use the advanced digital modulation techniques⁷ that had already been permitted by the U-NII rules.⁸

As a result of these rule changes, identical unlicensed devices can now operate in the same spectrum under two different sets of rules. Moreover, as the Commission points out, different measurement procedures apply to these two rule sections. This means that the two sections can treat identical devices operating in identical spectrum differently.⁹ Therefore, the Commission proposes to apply the compliance testing procedures of Section 15.407 to the authorization of devices compliant with Section 15.247.¹⁰ The

⁷ NPRM at ¶22.

⁸ NPRM at ¶21.

⁹ *Id.*

¹⁰ NPRM at ¶23.

Commission also noted the difference in power spectral density (“PSD”) limits in the two bands and sought comments on which of the two PSD limits is appropriate.

It goes without saying that the Commission should not apply different measurement procedures to similar (or even identical) devices operating in the same frequencies. Cisco fully supports adopting a single measurement procedure for digital devices that operate in the 5 GHz band. However, the Commission should go beyond simply aligning peak power and PSD limits as it has proposed.

The out-of-band emission masks for Section 15.247 and for Section 15.407 are also drastically different. For Section 15.247, the specification is for -20 dBc¹¹ conducted or radiated power. That specification is not linked to antenna gain or to maximum power. It is a relative PSD only. But under Section 15.407, the requirement is for -17 dBm/MHz *EIRP* at the band edge and -27 dBm/MHz *EIRP* at 10 MHz away from the band edge. Under this scheme, for example, a system with a 23 dBi antenna, would have a PSD limit of -40 dBm/MHz conducted power at the band edge and -50 dBm/MHz conducted power 10 MHz away from the band edge. A system with a 23 dBm transmit power (10 dBm/MHz in-band PSD), would have a limit at the band edge of -50 dBc and a limit of -60 dB at 10 MHz away from the band edge. The relative PSD requirement would be even lower for systems with higher gain antennas or with higher transmit power.

Consequently, aligning the Section 15.247 power measurement procedure to that in Section 15.407 would allow the average power of an 802.11a device to increase as much as 10 dB. That, in turn, would allow out-of-band emissions for an 802.11a device to increase by as much as 10 dB (because the Section 15.247 emission mask is a relative

¹¹ “dBc” = decibels relative to the carrier signal level.

mask). Surely this is not the Commission's intent. While it makes sense to align sections 15.257 and 15.407, the Commission's proposal could have a detrimental impact on the installed base of devices because of the potential for increased out-of-band emissions. To avoid this problem, the Commission should change the out-of-band emission mask in Section 15.247(c) to -30 dBc.

Finally, as long as it is aligning Section 15.247 and Section 15.407, the Commission should fully align the allocation for the two sections. Under current rules, devices authorized pursuant to Section 15.247 can use 125 MHz of spectrum, from 5.725-5.850 GHz. Yet devices operating pursuant to Section 15.407 can use only the first 100 MHz of this band, from 5.725-5.825 GHz. While this distinction made sense when the U-NII band was created, the distinction between "U-NII devices" and "spread spectrum devices" has now all but disappeared. And this has not escaped the Commission's notice. As it recently said in ET Docket No. 99-231, "we will remove any regulatory distinction between direct sequence spread spectrum systems and systems using other forms of digital modulation."¹² The 25 MHz allocation distinction between digital devices operating under Sections 15.247 and 15.407 band is, therefore, an anachronism. Accordingly, the Commission should permit digital devices, whether authorized pursuant to Section 15.247 or Section 15.407, to operate throughout the 5725-5850 MHz band.¹³

¹² See Amendment of the Commission's Rules Regarding Spread Spectrum Devices, 17 FCC Rcd 10755 at ¶11. (rel. May 30, 2002).

¹³ Cisco has made this request before. *See* Comments of Cisco Systems, Inc. (filed September 3, 2003) responding to the Commission's *Revision of Parts 2 and 15 of the Commission's Rules to Permit Unlicensed National Information Infrastructure (U-NII) Devices in the 5 GHz Band* in ET Docket No. 02-122 (rel. June 4, 2003).

III. THE COMMISSION SHOULD MANDATE TESTING IN ITS FLEXIBLE EQUIPMENT AUTHORIZATION PROPOSAL AND APPLY THAT PROPOSAL TO MANUFACTURERS

As an equipment manufacturer, it is not surprising that Cisco very much believes that the Commission should create flexible equipment authorization procedures.

However, the Commission should add a testing obligation to its current proposal for flexible equipment authorization for radio transmission systems,¹⁴ and should allow manufacturers the same flexibility granted to network operators.

The Commission proposal to allow flexibility for radio transmission systems is grounded in its belief that wireless internet service providers (WISPs), or others providing a commercial service with unlicensed devices, ought to be able to customize their radio transmission systems to fit particular applications. The Commission's believes that technically competent persons should be able to assemble customized systems based on technically equivalent and already approved equipment – without seeking new equipment authorizations – and still arrive at a system that is no worse an interference hazard than a complete system that had undergone a single Commission authorization process.¹⁵

The potential flaw in this reasoning is that different amplifiers – though their technical specifications appear similar (or even identical) – may interact differently with other components to which they are matched. In other words, an amplifier inserted as the final stage of a system with which it has not been tested could produce system RF emission characteristics that could not be predicted by the amplifier's specifications. The system emissions could exceed the Commission's applicable in-band or out-of-band emissions limits even if a good professional installer crafted what appears to be a lawful

¹⁴ NPRM at ¶¶18-21.

¹⁵ NPRM at ¶19

system. Building a system with an amplifier that has not been tested with other system components is no different than a manufacturer changing the final active gain stage (the amplifier) of an integrated device.¹⁶ But this, of course, would require a new equipment authorization under existing rules.¹⁷

Cisco believes there is an easy way to allow WISPs and others to craft the wireless networks they need, while ensuring that these networks operate within the Commission's rules. The Commission should simply add to its flexibility proposal a provision requiring testing of the final system configuration to verify that the system complies with the Commission's rules. To plagiarize an old phrase from the national security community: trust, but verify.

Finally, there is no reason why the flexibility the Commission proposes to grant network designers should not also be granted to device manufacturers. As noted, manufacturers of unlicensed devices cannot today change the final amplification stage of their devices without seeking a new equipment authorization.¹⁸ If the Commission adopts its flexibility proposal – whether as proposed or in a modified form – it should also grant manufacturers permission to modify the final active gain stages of their devices without a new equipment authorization.

IV. THE COMMISSION SHOULD ISSUE GUIDANCE ON WHAT CONSTITUTES A PROFESSIONAL INSTALLER UNDER ITS RULES

The Commission's proposal to allow flexible equipment authorizations for radio transmission systems hinges on technically competent persons (*i.e.*, professional

¹⁶ A self-contained Wi-Fi access point, for example, also has a final amplification stage. The manufacturer of that access point receives FCC certification only for the device as submitted. Modifications of the final amplification stage would require testing to ensure the modified device meets the Commission's limits.

¹⁷ See Section 2.1043.

¹⁸ *Id.*

installers) installing complete radio systems composed of already authorized components that are technically equivalent. For this proposal to work, however, the installer must actually be competent. But the Commission has never issued any guidance about what it means by the term “professional installer.” Cisco has previously suggested that the Commission issue general guidance on “minimum” qualifications for professional installers.¹⁹ In light of the Commission’s flexible equipment authorization proposal, adopting guidance on qualifications for a professional installer is even more important.

Luckily, the industry most affected by this proceeding is in wide agreement on what it means to be a “professional installer.” In a prior Commission proceeding, Cisco and others filed comments commending the definition of a professional installer used by the National Association of Radio Telecommunications Engineers, Inc.’s (“NARTE”):

An individual that has been thoroughly trained either through in-house training, by the manufacturer of the equipment, or by a 3rd party and is technically qualified to perform one or more of the following tasks, the site survey , or installation and configuration of the system, field modification and upgrades, or repair and service of the Part 15 wireless equipment that requires professional installation per Part 15.203 of the Commissions rules.

Adopting guidance based on this definition will help ensure that those Commission rules that rely on professional installation will be implemented as planned. It would also help Cisco and other manufacturers who, under existing rules, often receive customer calls inquiring about who qualifies as a “professional installer” under Commission rules.”²⁰

¹⁹ See Comments of Cisco Systems, Inc. at fn. 13 (filed October 18, 2002) *2002 Biennial Review of Telecommunications Regulations Within the Purview of the Office of Engineering and Technology* In ET Docket No. 02-312 (rel. September 26, 2002).

²⁰ Id.

V. THE COMMISSION SHOULD ADOPT EVEN MORE FLEXIBLE RULES FOR MODULAR TRANSMITTER APPROVAL AND APPLY THOSE RULES TO PART 2

As the Commission notes in the NPRM, modular transmitters save manufacturers time and expense because under the modular transmitter authorization scheme, a new equipment authorization is not needed every time the same transmitter module is installed in a different device.²¹ The ability to use “approve-it-once” modular transmitters in a variety of devices also benefits consumers by lowering the cost and raising the number of high technology devices available to them. Therefore, Cisco strongly supports²² the Commission’s initiative in this area and generally supports the proposals in the NPRM.

However, the Commission should be careful not to draft its modular approval requirements too tightly, so as to avoid limiting engineering flexibility in how compliance requirements are met. Cisco also believes that the modular transmitter approval concept could be applied even more broadly than proposed.

The Commission has proposed two sets of requirements for modular transmitter approval. The first set is for modules that are “self-contained,”²³ and is a codification of the Commission’s 2000 Public Notice that gave guidance to manufacturers by identifying eight criteria that must be met to receive a modular transmitter certification.²⁴ The second set consists of modifications to the original eight criteria to address “partitioned

²¹ NPRM at ¶31.

²² Cisco also filed comments on this issue in response to the Commission’s *Notice of Proposed Rulemaking* in ET Docket No. 03-137 (regarding RF exposure).

²³ The Commission describes a self-contained module as an RF transmitter missing only an input and a power source. NPRM at ¶31.

²⁴ NPRM at ¶31. Also see *Public Notice*, Part 15 Unlicensed Transmitter Approval, DA 00-1407, released June 26, 2000.

modules.”²⁵ But the proposed criteria are, in several respects, more specific than necessary and could inadvertently affect circuit design and manufacturing process decisions. These criteria could benefit from either modification or clarification.²⁶

First, in criterion 3, the Commission requires that a modular transmitter “must have its own power supply regulation.”²⁷ However, the Commission correctly notes that transmitter modules “generally consist of a completely self-contained radiofrequency transmitter missing only an input and *power source* to make it functional.”²⁸ When the power source is in the host device, it often makes sense also to have the power regulation in the host device. And, in fact, many devices (*e.g.*, PCMCIA cards) can be regulated either by a built-in regulator or by the host device; in either case, the device is designed with a specific operating voltage that is required for its proper functioning and does not have its own power supply. For this reason, it would be better if the Commission simply required that the modular device be capable of operating only at the supply voltage used for its authorization, rather than that it have its own power supply regulation.²⁹ Thus, Cisco believes the text of the third criterion should read follows:

²⁵ The Commission describes partitioned modules as a transmitter consisting of a radio front end (or radio elements) and firmware to control the operation of the radio. NPRM at ¶33.

²⁶ Cisco also filed comments on this issue in response to the Commission’s *Notice of Proposed Rulemaking* in ET Docket No. 03-137 (regarding RF exposure). Cisco supported streamlining the RF exposure evaluation process by – among other things – permitting “host independent” transmitter modules to be tested for compliance with Commission rules using representative host platforms. In that proceeding, the Commission identified three categories of host platforms: radiotelephones, laptop (notebook) computers and personal digital assistants (PDAs). Cisco’s view remains that because the form factors of these devices vary little, it should only be necessary to test a modular transmitter in representative platforms. Once a device is approved using representative platforms, it could be installed in any radiotelephone, notebook computer or PDA. To require testing in each and every host device will result in a loss of authorization efficiencies Cisco believes the Commission hopes to gain. *See* Comments of Cisco Systems, Inc. filed December 8, 2003.

²⁷ NPRM at ¶35.

²⁸ NPRM at ¶31.

²⁹ Put another way, all modular devices are self-regulating either by on board regulation or because excessively high supply voltages applied to a transmitter module will ruin it.

3. The modular transmitter must not be capable of operating at supply voltages higher than that for which it has received certification.

Second, Cisco believes that criterion “2”, which requires that all modular transmitters use “buffered modulation/data inputs” to ensure that Part 15 requirements are still met “under conditions of excessive data rates or over-modulation,”³⁰ is unnecessary. Many modular devices, such as PCMCIA cards, Cardbus and mini-PCI cards have noise regulation on board the card, so buffers are not needed. Further, some of the newer devices have buffers designed into the chips and various standard connection busses have data and over voltage protection built in. This criterion could force manufacturers to design unneeded duplication into their devices.

Third, as noted above, the Commission has proposed to make the current antenna replacement rules more flexible by requiring manufacturers to test transmitters only with the highest gain antenna they will use, rather than with all antennas. This type of flexibility is also extremely important for transmitter modules, since they are likely to “plug-in” to host devices that have built in antennas. Consequently, the Commission should either eliminate criterion “4,” or make it clear that its more flexible multiple antenna rule applies to transmitter modules.

In addition, Cisco believes that the Commission would be wise to extend its proposed transmitter module rules to encompass more than just Part 15 devices. Though specific “requirements” may be different under different rule parts (such as those for licensed services), the concept of module approval is a useful one that can be adapted elsewhere. In particular, Cisco proposes that the Commission generalize its modular transmitter approval requirements and adopt them under Part 2 of its rules.

³⁰ NPRM at ¶35.

VI. THE COMMISSION SHOULD ADOPT RULES THAT PERMIT A WIDE RANGE OF ADVANCED ANTENNA TECHNOLOGIES

In its NPRM the Commission proposes a number of rules to permit advanced antenna technologies – previously permitted by waiver – to be granted equipment authorizations routinely. Cisco strongly supports the adoption of new rules that would ease the deployment of advanced antenna technology and foster a new generation of more spectrum efficient, higher-capacity wireless broadband access systems. Cisco merely asks that, in crafting its final rules, the Commission do all that it can to accommodate as many of the new antenna technologies as possible.

In addition, Cisco requests that the Commission take the opportunity to codify the classification of subscriber-to-hub links in point-to-multipoint systems for the purpose of permitted antenna gain. The Commission’s rules say that point-to-multipoint systems cannot use antenna gains permitted point-to-point systems.³¹ However, the rules do not on their face distinguish the directionality of system links. In a point-to-multipoint system, the central “point,” or hub, communicates to a number of “subscribers.” But the subscriber in such a system communicates *only* with the hub. This subscriber-to-hub link is, in fact, a point-to-point link that should be permitted to operate under the point-to-point rules. The Commission has already so stated, but it would be worthwhile to codify this rule clarification.³²

³¹ See Sections 15.247(4)(iii) and 15.407(3).

³² In November of 2000, Cisco requested that the Commission’s Office of Engineering and Technology (“OET”) clarify that the return (subscriber-to-hub) link in a point to multipoint system is, in fact, a point-to-point link. ³² OET responded that indeed the return link is a point-to-point link and, therefore, is eligible to operate at powers and antenna gains permitted Part 15 point-to-point links. This interpretation has provided enormous flexibility for system implementations.

VII. TELECOMMUNICATION CERTIFICATION BODY RE-ACCREDITATION INTERVALS SHOULD BE THE SAME FOR BOTH FOREIGN AND DOMESTIC ENTITIES

In the NPRM, the Commission notes that its rules do not address accreditation intervals for laboratories that submit Part 15 and Part 18 test data for certification. The Commission states that accreditation bodies generally determine re-accreditation intervals on their own. Domestic laboratories are usually accredited every two years, while many foreign laboratories are evaluated every seven years.³³ The Commission proposes that all labs – foreign or domestic – be accredited every two years.³⁴

The Commission’s proposal makes great sense. First, and most importantly, a two-year certification interval will help ensure that all laboratories – both foreign and domestic – are competent to test to the Commission’s equipment authorization specifications. Second, it will create a level playing field for U.S. laboratories. Today, they are at a comparative disadvantage against foreign laboratories that may have a far less demanding certification cycle.

VIII. OTHER MATTERS

Import Conditions. The Commission notes in the NPRM that Hewlett-Packard Company (“HP”) requests that the Commission increase the limit on the number of not-yet-authorized, unlicensed devices that can be imported for testing, evaluation and demonstration purposes.³⁵ The Commission goes on to describe HP’s contention that the current import limits do not reflect today’s manufacturing and marketing techniques.³⁶

³³ NPRM at ¶57.

³⁴ *Id.*

³⁵ NPRM at ¶50. The Commission cites HP’s request as “HP comments at 7. However, there is no reference to the proceeding in which those comments were filed. Currently, the Commission allows importation of up to 200 devices for evaluation and testing and up to 10 for demonstration at industry trade shows and such. *See* Section 2.1204.

³⁶ *Id.* At ¶48.

Cisco agrees with HP. Cisco understands the Commission’s concern about potential abuse of relaxed importation rules for “unlicensed” devices, as distinct from licensed devices, which the Commission reasons are more likely to remain within the control of the manufacturer or licensee. However, Cisco believes that at the “not-yet-authorized” evaluation and demonstration stage there is little distinction between a device intended for eventual licensed use and a device intended for eventual “unlicensed” use. In both cases, the importing manufacturer or its agent will maintain control and responsibility for the whereabouts and use of devices imported pursuant to Section 2.1204. Raising the current limits on “unlicensed” device importation will, without any real risk, reduce the administrative burden on both the Commission and industry, and update the import rules to reflect current market realities.

Electronic filing. The Commission proposes to require electronic filing for applications for equipment certification as well as for requests for assignment of a grantee code.³⁷ Cisco believes that virtually everyone who would file for equipment certification or for a grantee code has access to both a computer and the Internet. Cisco supports these proposals since they will relieve the Commission of the administrative burden of handling paper filings.

CONCLUSION

As the Commission knows, technology advances rapidly. What was thought impossible five years ago is, today, done routinely. Any rules regulating technology are a snapshot taken at set point along the technology continuum and – in the best of circumstances – are a regulator’s best attempt to look forward while balancing myriad interests. Crafting the right rules is difficult at best.

³⁷ NPRM at ¶¶ 54 and 55.

Cisco, despite its suggestions for modifications, believes that the Commission has crafted important and helpful proposals in this NPRM. These proposals – particularly if fine-tuned as Cisco urges – will result in a regulatory regime that will be in line with the steady advance of wireless technology and an important step forward in the elimination of unnecessary regulation.

Respectfully submitted,

A handwritten signature in black ink that reads "SCOTT HARRIS". The signature is written in a cursive style with a long horizontal stroke extending to the left of the name.

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