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

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| In the Matter of | ) | |
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| Skype Communications S.A.R.L. | ) | |
| Petition to Confirm A Consumer's Right | ) | |
| To Use Internet Communications | ) | RM-11361 |
| Software and Attach Devices to Wireless | ) | |
| Networks | ) | |
| | ) | |
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**REPLY COMMENTS OF SKYPE COMMUNICATIONS S.A.R.L.**


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Dated: May 15, 2007

## SUMMARY

The record in this proceeding establishes that consumers will be better off if the Commission grants the above-referenced Petition. The comments further confirm that control over handset design and the applications that run on wireless handsets has shifted too far in the direction of the wireless carriers. To redress that imbalance, Skype recommended that the *Carterfone* "attachment" principle, and the right of a consumer to run applications of their choice — both of which are reflected in the Commission's *Broadband Policy Statement* — should be affirmed by the Commission and applied to the carrier practices that gave rise to Skype's and other's concerns.

As several commenters pointed out, the Internet communications marketplace is poised to unlock new sources of price competition and innovation — if the Commission moves to place consumers at the center of its wireless competition policy framework. The sources of innovation in wireless devices and applications need not be bounded by a universe consisting only of facilities-based carriers. Skype, for example, offers consumers a way to reduce the costs of their conversations and in so doing, stimulates demand for wireless networks. Applying the Commission's *Broadband Policy Statement* to wireless will encourage a virtuous cycle of network and software investments that fully support the Commission's broadband goals.

It is wrong to conclude that the Commission's only choices are either to do

nothing to foster consumers' interests or to impose detailed and burdensome regulation on the wireless industry. There is a responsible middle ground. By affirming the applicability of the *Broadband Policy Statement*, the Commission will take an important first step in ensuring that consumer choice is promoted — all without saddling the wireless industry with unnecessary regulation.

The comments filed by consumers, consumer groups, high-tech industry trade associations, and others support the application to wireless networks of the principles in the Commission's *Broadband Policy Statement* and show that consumers are not enjoying the full benefits of innovation in the market for wireless handsets and applications. The carriers' comments defend current blocking practices and concede that they disable features and presumably will continue to do so. On this record, the Commission has sufficient basis to grant Skype's Petition.

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**REPLY COMMENTS OF SKYPE COMMUNICATIONS S.A.R.L.**

The record in this proceeding establishes that consumers will be better off if the Commission grants the above-referenced Petition ("Petition") filed by Skype Communications (S.A.R.L.).[1] As several commenters pointed out, the Internet communications marketplace is poised to unlock new sources of price competition and innovation — if the Commission moves to place consumers at the center of its wireless competition policy framework. Furthermore, granting the Petition will encourage a virtuous cycle of network and software investments that fully support the Commission's broadband goals.

A number of interested parties and a large number of actual consumers responded to the issues raised in Skype's Petition. We view this as a first step in our requested dialogue among the wireless industry, the technology industry and consumer groups, to strike the appropriate balance between wireless

[1] Skype Communications S.A.R.L., *Petition to Confirm A Consumer's Right To Use Internet Software and Attach Devices to Wireless Networks* (filed Feb. 20, 2007).

industry requirements and consumer rights — a balance that, today, has shifted too far in the direction of the network operators. By fostering such a dialogue, the Commission will ensure not only that wireless networks are protected and that network operators will have sufficient incentives to invest in their networks, but also that software applications developers and equipment manufacturers will have sufficient incentives to create new and innovative products and services.[2] We are confident that the outcome of this proceeding will assure that wireless broadband networks and applications are second to none — with consumers being the ultimate winners.

## I. THE WIRELESS CARRIERS MISCONSTRUED SKYPE'S POSITION AND OBJECTIVES.

An array of trade associations,[3] business interests,[4] and consumer groups,[5]

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[2] *Cf.* Remarks of FCC Chairman Kevin J. Martin to the National Cable & Telecommunications Association, Las Vegas, NV, May 7, 2007, at 4 ("Fundamentally, I am for innovation. It leads to new and improved services, and ultimately lower prices. When someone is innovating with voice competition, I am on their side.").

[3] Comments of the Information Technology Industry Council (Apr. 30, 2007) ("ITI Comments") (supporting the application of the Commission's *Broadband Policy Statement*, FCC 05-151, to wireless networks); Comments of the Consumer Electronics Association (Apr. 30, 2007) ("CEA Comments") (same); Comments of the VON Coalition (Apr. 30, 2007) ("VON Comments") (same).

[4] Comments of the American Petroleum Institute (Apr 30, 2007) ("API Comments") (requesting the Commission to declare that *Carterfone* applies to wireless networks and to initiate a rulemaking proceeding to examine wireless carrier practices in light of *Carterfone*); Comments of Mobile Industry Executives (May 1, 2007) ("Mobile Industry Executives Comments") (comments from two CEOs of mobile software applications and services companies, urging enforcement of the Commission's broadband principles in the wireless handset marketplace).

[5] Comments of the National Association of State Utility Consumer Advocates (Apr. 30, 2007) ("NASUCA Comments"); Comments of Consumers Union, Consumer Federation of America and Free Press (Apr. 30, 2007) ("Consumers Union et al. Comments"); Comments of the Ad Hoc Public Interest Spectrum Coalition (Apr. 30, 2007) ("Ad Hoc Public Interest Spectrum Coalition Comments"); Comments of People's Production

in addition to thousands of individual consumers,[6] support the essential thrust of the Petition — which is to affirm that consumers are entitled to attach nonharmful devices to wireless networks and use applications of their choice with those devices. The wireless network operators[7] and certain of their suppliers[8] oppose the Petition. Their submissions were substantive and largely constructive. As such, the comments are an important first step in the process of dialogue among interested parties. Moreover, many of their objections to the Petition stemmed largely from their misconstructions of Skype's position and objectives. Accordingly, in this Section, Skype restates and clarifies the purpose and objectives of its Petition.

### A. Granting the Skype Petition Does Not Require Detailed Regulation of Wireless Networks.

At the center of the Petition is Skype's request to affirm that the principles contained in the Commission's *Broadband Policy Statement* apply to wireless networks.[9] The wireless incumbents who oppose the Petition rely heavily on

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House (Apr. 30, 2007).

[6] As of May 15, 2007, over 4,500 comments had been filed by individual consumers in support of all or part of the Petition.

[7] *See* Comments of AT&T Inc. (Apr. 30, 2007) ("AT&T Comments"); Opposition of CTIA — The Wireless Association (Apr. 30, 2007) ("CTIA Opposition"); Comments of Sprint Nextel Corp. (Apr. 30, 2007) ("Sprint Nextel Comments"); Comments of T-Mobile USA, Inc. (Apr. 30, 2007) ("T-Mobile Comments"); Comments of Verizon Wireless (Apr. 30, 2007) ("Verizon Wireless Comments").

[8] Comments of Motorola, Inc. (Apr. 30, 2007) ("Motorola Comments"); Comments of LG Electronics MobileComm USA (Apr. 30, 2007) ("LG Comments"); Opposition of QUALCOMM Inc. (Apr. 30, 2007) ("QUALCOMM Comments").

[9] *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, CC Docket No. 02-33, *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities*, CS Docket No. 02-52, Policy Statement, FCC 05-151, at 3 (rel. Sep. 23, 2005) ("Broadband Policy Statement"). Note that the *Policy Statement*'s attachment

assertions that marketplace conditions are so perfectly competitive that there is no present or future risk of consumer harm. The real state of competition in the industry, however, is not quite so perfect. Yet, in requesting that the *Carterfone* principle apply to wireless networks, Skype recognizes that today's wireless industry indeed is different from the wireline industry of 1968, and that detailed regulation of wireless networks could well be counterproductive. However, it is wrong to conclude that the Commission's only choices are either to do nothing to foster consumers' interests or to impose detailed and burdensome regulation. There is a responsible middle ground. By affirming the applicability of the *Broadband Policy Statement*, the Commission will take an important first step in ensuring that consumer choice is promoted— all without saddling the wireless industry with unnecessary regulation.

### B. Consumers Should Have a Meaningful Choice Between Subsidized and Non-Subsidized Handset Purchases.

If the Commission protects a free market for devices by granting Skype's Petition, consumers will be empowered to choose between subsidized and non-subsidized handsets. Skype is not seeking to overturn the carrier practice of subsidizing handsets and bundling their sale with that of wireless service; these practices have had much to do with the widespread consumer uptake of wireless services. We do believe, however, that the Commission would be warranted, in light of today's wireless industry, to examine whether carriers are living up to

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principle cites to *Carterfone* as its genesis.

the requirement of the 1992 *CPE Bundling Order* that they give subscribers a meaningful opportunity to use an unbundled handset on the carriers' networks.[10] This requirement also is contained in the consumer's attachment right as expressed in the *Broadband Policy Statement*.

### C. Current Wireless Industry Practices Do Not Maximize Consumer Choice for Applications and Devices.

The record in this proceeding confirms Skype's concern that the major wireless carriers do not compete on the basis of the openness of their Internet offerings or their friendliness to unlocked smart phones. Skype agrees that wireless network operators face competition at some level and compete on price, coverage and quality of service, as well as on the availability of and the variety of handsets. However, Skype questions the level of competition with respect to handsets and mobile applications, in particular whether carriers exert inordinate control in those markets to the detriment of consumers.

As explained in the Petition,[11] all wireless network operators have a similar interest in maintaining a closed ecosystem with respect to the wireless CPE and applications available to subscribers. As was the case with number portability, the tendency of carriers to control the market for handsets and mobile applications may not be susceptible to marketplace correctives — despite the presence of several competitors — and requires some regulatory oversight. However, the Commission can exercise such oversight without resorting to

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[10] *Bundling of Cellular Customer Premises Equipment and Cellular Service*, Report and Order, CC Docket No. 91-34, FCC 92-207, 7 FCC Rcd 4028, 4028 (1992) ("*CPE Bundling Order*").
[11] Petition at 22-25.

detailed regulation or "one size fits all" government technical standards.

### D. The Petition Acknowledges a Carrier's Need to Manage and Prevent Harm to Its Network.

As made clear in its Petition, Skype recognizes the need for wireless carriers to manage their networks, and in fact has the same incentives as the carriers to produce software that performs efficiently in bandwidth-constrained environments. Skype also recognizes that wireless network management, including what is required to prevent "harm to the network," may well be different from network management in wireline networks. Moreover, the existence of regulatory mandates in the wireless industry, such as E911, accessibility for the disabled, and hearing aid compatibility, also distinguishes the wireless carriers' network management needs from those of wireline networks. Nonetheless, these technical differences can be accommodated while still protecting the critical rights of consumers to attach nonharmful devices to and run applications of one's choice on wireless networks. A better balance than exists now is required between these competing objectives. Obviously, Skype does not want to impair the integrity of the wireless networks or carriers' ability to comply with their regulatory obligations, but, as discussed in more detail below,[12] Skype believes that the parties, working together with the Commission, can achieve a better balance.

[12] *See* Section IV, *infra*.

## II. THE RECORD SUPPORTS THE NEED FOR THE COMMISSION TO ASSESS WHETHER CONSUMERS ARE ENJOYING THE FULL BENEFITS OF INNOVATION IN THE MARKET FOR WIRELESS HANDSETS AND APPLICATIONS.

The comments filed by consumers, consumer groups, high-tech industry trade associations, and others support the application to wireless networks of the principles in the Commission's *Broadband Policy Statement* and show that consumers are not enjoying the full benefits of innovation in the market for wireless handsets and applications.[13] The carriers' comments defend current blocking practices and concede that they intentionally disable features and will presumably continue to do so.[14] The Commission should now assess whether, in view of the carriers' current practices, consumers are being deprived of lower cost and more innovative applications, devices, and services.

With respect to the disabling of certain handset features, the Commission has a basis to question the carriers' assurances that they do not have undue influence over their handset suppliers and that consumers are getting the full benefit of competition in the handset industry. It is telling that handset manufacturers have very little retail presence in the U.S. independent of carrier-controlled outlets, but those same companies sell directly to consumers in other

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[13] Mobile Industry Executives Comments at 3-9; Consumers Union et al. Comments at 2-6; Ad Hoc Public Interest Spectrum Coalition Comments at 2-7; NASUCA Comments at 2-9; API Comments at 2-7; VON Comments at 6-8; ITI Comments at 4-5; CEA Comments at 2.

[14] *See, e.g.*, AT&T Comments at 48-55 (defending disabling of handset features on network management grounds); CTIA Comments at 24-30 (same); Verizon Wireless Comments at 23-28, 33-35 (same).

parts of the world.[15] The Commission may take notice of the fact that handset manufacturers paint a different picture of their relationship to their carrier "customers" when they speak to the press or Wall Street.[16]

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[15] *See, e.g.*, Howard Wolinsky, *Motorola Takes Its Show on the Road — To China: First of Global Stores Launches in Shanghai, But Won't Land In U.S.*, Chicago Sun-Times, July 13, 2006, at 57 (describing Motorola's plans to open independent stores in China and other parts of Asia and the rest of the world, but not in the United States). The difference between Motorola's global strategy and its practices in the U.S. market is worth noting:

> Jeremy Dale, Motorola vice president of global retail and channel marketing, said in a phone interview from China, "The Shanghai store will be the first permanent Motorola-branded flagship store. We plan to transform the way mobile devices are sold."
>
> He said Motorola has no plans to open a flagship store in the United States, where sales are dominated by wireless carriers, in contrast with China and many other markets where independent retailers are the dominant outlet for selling phones.

*Id.*

[16] *See* Christopher Rhoads & Li Yuan, *Dropped Call: How Motorola Fell A Giant Step Behind*, Wall St. J., Apr. 27, 2007, at A1 ("[Motorola CEO Ed] Zander began to resent the notion that wireless carriers, rather than consumers, were his primary customers . . . . This meant he had little control over pricing and distribution to the people who ultimately use the product. . . . Executives told him that carriers decide the price, and would go elsewhere if Motorola didn't want to lower its prices. 'I love my job. I hate my customers,' Mr. Zander shouted, according to people present."); Phil Carson, *Nokia Expands in U.S. With 'Imminent' Delivery of N75 to AT&T*, RCR Wireless News (May 1, 2007) (quoting Nokia CEO Olli-Pekka Kallasvuo as saying that his company has "about 1.3 billion customers" in China, but only four, "the top tier network operators," in the U.S.); Phil Carson, *Rattling the Cage: Handset Vendors Aim to Satisfy Carriers, But Also Explore Alternative Channels*, RCR Wireless News (Jan. 15, 2007) ("The single thread that emerged unbidden from conversations with the top-tier handset vendors at CES was — in so many carefully chosen words — the issue of carrier dominance in the U.S. market."); Kevin Maney, *FCC Ruling Changed Phone Industry in 1968; It Could Happen Again Today*, USA Today (Jan. 30, 2007), *available at* http://www.usatoday.com/money/industries/technology/maney/2007-01-30-carterfone_x.htm ("Cellphone makers want [handsets and service to be unbundled], though they don't like to say so and risk offending their wireless carrier partners."). *See also Fear Factor? Handset Makers Oppose Carterfone Rules for Wireless*, Comm. Daily, May 2, 2007 (quoting a wireline industry source as noting that equipment manufacturers with ties to network operators supported them in the wireline broadband classification

In addition to the examples cited by Skype in the Petition, as well as by others in the academic community, the Commission now has a record of over 4500 individual consumers who have participated in this proceeding, as well as the country's leading consumer groups[17] and representatives of the "high tech" industries,[18] pointing to consumer welfare problems in the wireless industry. These problems are expressed both as the inability to attach nonharmful devices to the network and/or the inability to use certain applications with the network. This substantial record belies the carriers' assurances that consumers are getting a full range of choice and opportunity with respect to attachments and applications.

In contrast to the views of consumer groups and others discussed above, the carriers claim that consumers already have sufficient choice among handsets. Carriers claim that while, for example, the Nokia E62 may have been stripped of

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proceeding and saying that "[m]ost of handset manufacturers have relationships with the major wireless providers . . . . Rather than harm that relationship, in the short term it's in their economic interest to maintain that relationship."); *id.* (quoting a wireless industry source as saying that "[c]arriers control 95% of the handset market and, clearly, opposing them is a complicated thing."); Amol Sharma et al., *Apple Coup: How Steve Jobs Played Hardball In iPhone Birth*, Wall St. J., Feb. 17, 2007, at A1 ("Apple bucked the rules of the cellphone industry by wresting control away from the normally powerful wireless carriers. These service providers usually hold enormous sway over how phones are developed and marketed — controlling every detail from processing power to the various features that come with the phone.").

[17] NASUCA Comments at 2-4; Consumers Union et al. Comments at 2-4; Ad Hoc Public Interest Spectrum Coalition Comments at 2-4.

[18] *See, e.g.*, Mobile Industry Executives Comments at 3-5; *see also* API Comments at 3-4 (discussing large business customers need for flexibility and noting the deficiencies in today's wireless marketplace).

Wi-Fi functionality, consumers may purchase other Wi-Fi-enabled phones.[19] First, it is telling that the carriers do not deny shaping handset design by disabling certain features. Moreover, consumers, not wireless carriers, should decide which handsets and handset features succeed or fail in the marketplace — as they do in other robustly competitive consumer electronics industries.[20] In contrast with the wireless industry, DSL and cable broadband operators have not constrained the development of devices and applications that are used on their networks; as a result, consumers in the computing industry have seen the full benefits of unconstrained innovation.

Wireless carriers and their partners are but a small subset of the vast numbers of technology and software innovators around the world who would be prepared to offer their wares in the U.S. wireless market.[21] What such innovators need is some expectation, if not assurance, that the equipment and applications that they invest in will not be blocked absent legitimate network management and security reasons. By affirming "attachment" and "no blocking" principles and examining the extent of the wireless carriers' control over the mobile

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[19] *See, e.g.*, AT&T Comments at 48-50.

[20] *See supra* note 16 for statements from handset manufacturers that suggest that they are constrained from meeting consumer demands.

[21] *See, e.g.*, Mobile Industry Executives Comments at 1, 6-7. The vast majority of companies innovating in the mobile software space do not have the resources to lobby the Commission. *Cf. id.* (noting that the mobile industry executives who filed these comments had never before participated in a proceeding before the Commission). *See also* Louis Trager, *Silicon Valley Gives Martin Earful on Carterfone Questions*, Comm. Daily, May 4, 2007, at 3 ("FCC Chmn. Martin said Silicon Valley pelted him with 'lots of concerns' about the wireless industry 'stifling' innovation in handsets and applications [at a Churchill Club technology-business forum in Mountain View, CA].").

handset and applications markets, the Commission would provide such assurances to innovators without subjecting carriers to burdensome regulation. In seeking an appropriate balancing of consumer and industry interests, the sources of innovation need not be bounded by a universe consisting only of carriers and those who are chosen as partners by carriers.[22]

As explained in the Petition, the Commission's policy always has been to maximize choice in consumer CPE, short of harming the network.[23] Skype filed its Petition because of its sense that there is now a lot more room for consumer choice and that providing for more choice would yield enormous benefits.

## III. THE COMMISSION SHOULD AFFIRM THAT THE PRINCIPLES OF ITS *BROADBAND POLICY STATEMENT* APPLY TO WIRELESS NETWORKS AND SHOULD DETERMINE WHETHER THOSE PRINCIPLES ARE BEING HONORED.

The Commission should affirm that its broadband principles, including the "right to attach"[24] and "no blocking" principles, apply regardless of the

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[22] Along similar lines, several carriers and their partners complain that if Skype wants mobile broadband users to use Skype, it should buy spectrum at auction and become a facilities-based competitor. *See, e.g.*, Verizon Wireless Comments at 1-4; Comments of MetroPCS Communications at 9-10 (Apr. 30, 2007). While Skype agrees that more facilities-based broadband network competitors would be beneficial, it rejects any suggestion that the only companies that should be welcome as innovators on wireless networks are those that invest in purchasing spectrum and building out networks. Consumers benefit the most when firms are permitted to develop their core competencies and freely interact with each other in complementary ways to produce products and services that benefit consumers. For example, computer hardware and software companies interact with Internet companies in a manner that enhances the value of all their products and services and contributes immeasurably to consumer welfare. The same can be true in broadband wireless networks.

[23] Petition at 9-12 (discussing the Commission's support for the "attachment" principle in various markets, from telephone CPE to cable set-top boxes).

[24] *See* API Comments at 3 ("Large business customers clearly desire the flexibility to maintain the use of wireless devices as they migrate from one wireless carrier to

technology used to provide broadband services. At the same time, the Commission should examine the state of the wireless CPE and applications market to ensure that such principles are being honored.[25]

In the time since the Petition was filed, the Commission has declared that wireless broadband services are classified as Title I "information services."[26] In classifying wireless broadband services in the same regulatory category as DSL, cable modem, and broadband over power line, the Commission noted that such a classification "furthers [the Commission's] efforts to establish a consistent regulatory framework across broadband platforms by regulating like services in a similar manner."[27] By affirming that the principles of the *Broadband Policy Statement* apply to wireless networks, the Commission would further this important policy of technological neutrality and regulatory parity.

### A. Consumers Are Entitled to Attach Nonharmful Devices to Wireless Networks.

Skype has every interest in the technical integrity of wireless networks and has the same incentives as network operators to ensure that the network harms feared by the carriers do not occur.[28] Skype commends the carriers for

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another . . . . For many customers, device portability is becoming the 'other side of the coin' to wireless number portability.").

[25] NASUCA Comments at 8; Consumers Union Comments at 5-6; VON Comments at 8-9; ITI Comments at 6-7; Ad Hoc Public Interest Spectrum Coalition Comments at 5-6.

[26] *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks*, Declaratory Ruling, WT Docket No. 07-53, FCC 07-30, at 2, ¶ 2 (rel. Mar. 23, 2007) ("Wireless Broadband Order").

[27] *Id.*

[28] *See, e.g.*, Verizon Wireless Comments at 33-35; AT&T Comments at 41-44, 52-56; Sprint Nextel Comments at 21-24.

beginning this process by providing information on the technical considerations underpinning their attachment and application decisions and handset certification programs.

Nonetheless, as explained in further detail below, Skype believes that the carriers exaggerate the harm that may befall wireless networks should unaffiliated devices be attached to their networks. Software applications developers and equipment manufacturers have every incentive to ensure that their applications and devices serve their users' needs and do not harm wireless networks. Moreover, carriers themselves suggest that consumers may purchase handsets independently and use them with their wireless services (consistent with the terms of the 1992 *CPE Bundling Order*), suggesting that the attachment of independent nonharmful devices will not cause harm to their networks.[29]

### B. Consumers Are Entitled to Run Applications of Their Choice on Wireless Networks.

As explained in the Petition, carriers employ a range of restrictions on applications via Terms of Service limitations.[30] Though carriers attempt to justify restrictions on certain applications based on the need to manage their networks, many of their restrictions are overbroad and apply even to applications such as Skype that do not use excessive amounts of bandwidth.

As mobile telephones become similar to computer platforms — capable of supporting applications developed independent of the device manufacturer or

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[29] *See, e.g.*, T-Mobile Comments at 11 & n.41; AT&T Comments at 11-12.
[30] Petition at 18-19.

the distribution channel — the greater good is best served by ensuring that the same dynamic that pertains in the Internet environment is present as the Internet goes wireless. The time to act is now, before restrictive practices become entrenched. As noted above, the universe of innovation in wireless applications is not defined only by carriers and the partners with whom they choose to do business. On all computing platforms, both the industry and consumers have benefited from the consumers' right to use applications of their own choosing, without ISPs, carriers, PC manufacturers or others determining that certain applications should be prohibited.

Wireless carriers' present restrictive practices are more a matter of their incumbent business models rather than an effort to prevent harm to their networks.[31] Moreover, some carriers suggest that Skype software can be used today on wireless networks, which belies the carriers' concerns that VoIP applications will harm their networks. The wireless operators cannot have it both ways: they cannot simultaneously argue that regulatory review of their practices is not warranted because, for example, Skype is being used on wireless networks, while at the same time defend a blanket VoIP blocking policy that

[31] Some carriers appear to recognize the limitations of closed business models. *See A World of Connections: Overcoming Hang-Ups*, The Economist, April 21, 2007, at 8 ("Yet some mobile operators are trying to change their business models. Sprint Nextel's chief technology office, Barry West, imagines a world in which someone who buys a television or washing machine from any shop and plugs it in can connect it to Sprint's network. The network itself will be open to the internet and users will be able to do what they like, rather than being funneled to content providers with which the operator has a business relationship, as happens with most mobiles today.").

threatens the very existence of VoIP-based competition.[32]

To the extent that carriers must restrict certain applications, such restrictions should be tied to the specific technical characteristics of the applications and should not be broadly applied to restrict all uses of particular applications irrespective of their technical impact on the network.

## IV. THE TECHNICAL CONCERNS EXPRESSED BY THE WIRELESS NETWORK OPERATORS ARE OVERSTATED.

Skype recognizes that there are technical differences between applying the Commission's *Broadband Policy Statement* to wireless networks and applying it to wireline networks. Skype, however, believes that the carriers and their suppliers overstate or misstate the nature of the potential harm to their networks. The concerns raised can be resolved through cooperation among the affected parties and oversight by the Commission. Skype has addressed those concerns with wireless operators in Europe and Asia, proving in the marketplace that applications such as Skype can operate in a mobile environment if carriers adopt a progressive approach to Internet services.

### A. Skype Does Not Consume An Excessive Amount Of Bandwidth.

Contrary to the assertions of some wireless carriers,[33] Skype does not consume an excessive amount of bandwidth. Skype has mobile versions of its software that are optimized for wireless networks. In particular, Skype

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[32] It is likely that, given a meaningful choice, wireless subscribers would opt for having access to a variety of VoIP providers, as they do on the wired Internet. *See id.* ("[A]ll operators are feeling the pressure of the internet. There is plenty of evidence that customers want to control their phones as they do their PCs . . . .").

[33] *See, e.g.*, CTIA Comments at 40-41; AT&T Comments at 53-55.

engineers have worked to ensure that the amount of bandwidth consumed by the application is trivial, particularly where operators have engaged the company in a collaborative model.[34] Recognizing the bandwidth constraints of wireless networks, Skype's mobile software does not engage in any of the "unfriendly" behavior during dormant periods that some carriers appear to fear. For example, the editions of Skype built for Windows Mobile, for our carrier-collaborative model and for embedded devices such as Wi-Fi phones, can never serve as a supernode, regardless of the device's network or other characteristics. This is in part due to Skype's recognition that these devices have limited processing power and a finite battery life.

In addition, Skype's mobile software is optimized in much the same way wireless carriers discuss optimizing mobile applications, by, for example, using efficient vocoders and power supplies. Skype's mobile software also disables more bandwidth-intensive features, such as video and conference calling, found on the regular Skype software. What this illustrates is that applications developers such as Skype have the same incentives and objectives — to provide a software product that enables its users to function in bandwidth constrained environments while preserving battery life.

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[34] *See Skype and Hutchinson 3 Group Join Forces to Offer Skype on Mobile Devices*, Press Release (Feb. 14, 2006), *available at* http://about.skype.com/2006/02/skype_and_hutchison_3_group_jo.html. The collaboration between Skype and Hutchinson 3 illustrates how Skype can work together with carriers to transfer voice traffic to their circuit-switched networks, thereby further alleviating any concerns regarding congestion of their broadband networks.

### B. Affirming the Attachment and "No Blocking" Principles for Wireless Networks Need Not Interfere With Carriers' Regulatory Obligations.

Skype believes that equipment and applications can be designed so as not to threaten network operators' regulatory requirements such as E911, disabilities access, hearing aid compatibility, CALEA, and local number portability. Applications used on a mobile handset will not undermine the existing functionality of wireless handsets that enables them to comply with applicable regulatory requirements.

With respect to wireless handsets, such devices will still be subject to the Commission's equipment authorization process, which can ensure that they do not interfere with wireless carriers' regulatory obligations. Moreover, wireless carriers already support E911 calling for subscribers who use unlocked phones and for roaming users, which suggests that there is no technical reason why carriers could not also support such services for third party handsets that are attached to the network.

### C. Network Security Can Be Protected Without Categorically Excluding Certain Applications or Devices.

Skype recognizes the need for network operators to ensure network security, but believes this is possible without categorically blocking certain applications. While carriers point to comments by Skype founder Niklas Zennstrom as evidence that closed systems are necessary to protect security,[35] his comments demonstrate that Skype and wireless operators each have marketplace

[35] *See* CTIA Comments at 24.

incentives to ensure a consumer's high-quality, secure experience using the application, the wireless network, and both in combination. To claim that the only way to protect against security risks is to operate an entirely closed network recalls arguments made by AT&T in *Carterfone* in 1968. Just as the incumbents were wrong then, they are wrong now.

## V. CONCLUSION

Skype respectfully requests that the Commission grant the relief requested in its Petition and described above. We stand ready to answer any additional questions that the Commission may have in this matter.

Respectfully submitted,

SKYPE COMMUNICATIONS S.A.R.L.

/s/

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Dated: May 15, 2007