

August, 10 2004

To:  
Roger Marks, Chair 802.16  
Daleep Mohla, Chair Nescom Board  
Nescom Board Members  
Don Wright, Chair IEEE-SA Board  
IEEE-SA Board Members

The IEEE 802.16 members in Korea (operators, vendors, and research institute) listed below wish to express our interest and support for IEEE 802.16 and the work of IEEE 802.16e (mobility enhancements to the IEEE 802.16-2004 standard). We are encouraged by the project goals, the perceived viability of the proposed solution mechanisms, and the open, collaborative, inclusive process the group has enjoyed. We are impressed by the productivity of the group and wish to reinforce our interest in seeing the next version of the standard completed within 6 months.

Of particular interest, we see the proposed revision to the PAR as a necessary step to enable the working group to develop a standard that meets the requirements provided by the operators in contribution IEEE C802.16e-04/236 and IEEE C802.16e-04/235. The 802.16 working group has modified its vision of what needs to be in a commercially viable standard as operator participation within 802.16 has grown over time and with the changing regulatory environment. Stated another way, the work of IEEE 802.16e is now more pertinent to a wider set of market applications in a wider frequency selection, and the PAR should be changed to reflect these interests.

Failure to approve the proposed PAR revisions severely dampens the commercial viability of the standard because manufacturers would be forced to develop non-compliant products, possibly based on 802.16, to meet operator's needs. The potential development of what is essentially non-standardized product by various manufactures would negate the economies of scale and the interoperability benefits that come with the development and use of standards based products and potentially undermine much of the value of the standard. In this environment operators are likely to consider proprietary solutions and /or look for ways to develop a de facto standard.

A great deal of international interest is currently focused on this endeavor and the IEEE should make all reasonable effort to facilitate the success of this standards project as it nears completion.

We thank you for your consideration of our Letter of Support and hope that you will approve the proposed revised PAR.

List of IEEE Members: (Alphabetical order)

**ETRI (Research Institute)**

Seung Ku Hwang  
Seokheon Cho  
Dongseung Kwon  
Hyoungsoo Lim  
Nam Hoon Park  
Youn Ok Park  
Byung-Han Ryu  
Choong-II Yeh  
Kunmin Yeo  
Chulsik Yoon

Signature of Representative 

**Hanaro (Operator)**

Pyung-Su Park

Signature of Representative 

**KT (Operator)**

Seong Choon Lee  
Yong-Bum Kim  
Jeong-Hwi Kim

Signature of Representative 

**LG Electronics (Manufacturer)**

Chang-jae Lee  
Kiseon Ryu

Signature of Representative 

**Samsung (Manufacturer)**

YoungKyun Kim  
Chanhoi Koo  
Panyuh Joo  
Jae Hwan Chang  
Yong Chang  
Jung Won Kim  
Geunhwi Lim  
Yong Je Lim  
Seung Joo Maeng  
Jung Je Son  
Yeong Moon Son  
Jaeweon Cho

Signature of Representative 

**SKT (Operator)**

Dong-II Moon

Signature of Representative 

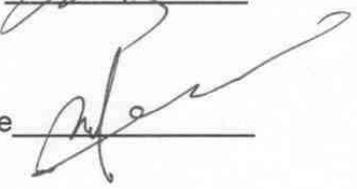
**SOLiD Technologies (Manufacturer)**

Jae Hak Lee  
Jin Yong Chung

Signature of Representative 

**TTA (Korea SDO)**

Hyoung-jin Choi

Signature of Representative 

September 9, 2004

Mr. Jim Carlo  
President of the IEEE-SA Board of Governors

Re: 802.16 PAR change

Dear Mr. Carlo,

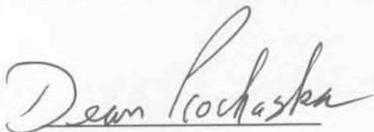
The operators listed below wish to express our interest and support for IEEE 802.16, in particular the work on IEEE 802.16e (mobility enhancements to the IEEE 802.16-2004 standard). We are encouraged by the project goals, the perceived viability of the proposed solution mechanisms, and the open, collaborative, inclusive process the group has enjoyed. We are impressed by the productivity of the group producing 802.16e and wish to emphasize our interest in seeing this next version of the standard completed in a timely manner.

In this regard, of high importance to us is the proposed revision to the PAR of 802.16e which we see is a necessary action to allow the working group to develop a standard meeting the requirements we shared in contribution # IEEE C802.16e-04/235. The proposed PAR change stems from the 802.16 working group's modified vision of what needs to be incorporated into a commercially viable standard. This change in vision arises partially from recently increased operator participation in 802.16 and changing regulatory environment. The work of IEEE 802.16e is now a fundamental element for a wider set of market applications in wider operating frequencies than originally proposed.

Failure to approve the proposed PAR revisions severely limits the commercial potential of the standard. Manufacturers would be forced to develop products, non-compliant with 802.16, to meet operator's needs such as ours. The development of a non-standardized product by various manufactures would negate the economies of scale and interoperability benefits that come with the use of standards based products. This reduced potential would also limit the influence this standard has in establishing the wireless broadband industry.

A tremendous level of international interest is focused on this endeavor and the IEEE should make all reasonable efforts to ensure the success of this standard project as it nears completion.

We thank you for your consideration of our Letter of Support and urge the board to approve the proposed revised PAR.



Mr. Dean Prochaska  
Director Industry Standards  
Sprint Corporation  
6220 Sprint Parkway  
Overland Park, KS 66251



Mr. Steve Dennett  
Director - Technology Strategy and Standards  
Nextel Communications  
2001 Edmund Halley Drive  
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**Wireless Communications Association International**

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Sept. 16, 2004

VIA ELECTRONIC MAIL

Mr. Daleep Mohla  
Chair  
IEEE-SA Standards Board New Standards Committee (NesCom)

Dear Mr. Mohla:

The Wireless Communications Association International (WCA), the trade association for the wireless broadband industry, writes to express its strong interest in voluntary standards efforts for the industry. In particular, WCA strongly encourages IEEE NesCom to permit standards activity for mobile and portable applications to proceed in a timely manner and in an even-handed manner between 802.16e and 802.20 proponents.

As context, WCA is world's oldest and largest trade association focused solely on the wireless broadband industry. Our diverse membership consists of approximately 250 companies in both the United States and elsewhere in the world. WCA is wireless broadband's primary advocate on legal and policy issues in Washington, DC, and has participated in virtually every major FCC initiative affecting wireless broadband service. Also, we are active internationally at the ITU and elsewhere, at the states and before Congress. Last fall, for example, we helped lead the fight to preserve the primary federal loan program that supports rural wireless broadband service managed by the Rural Utilities Services of the U.S. Department of Agriculture. As we wrote recently in a filing to the FCC, wireless broadband clearly is rapidly gaining ground on its tethered competitors, and is on the verge of a major breakthrough in the United States and around the world. The keen interest in lower costs and interoperability has a great deal to do with this renewed interest, and it is part of the association's longstanding goal to facilitate standards efforts.

To this end, we specifically seek to enable the work on IEEE 802.16e to be completed in a timely manner by approval of the proposed revision to the 802.16e PAR.

Thank you in advance for your consideration of this letter.

Very truly yours,

A handwritten signature in black ink that reads 'Andrew Kreig'.

Andrew Kreig  
WCA President

2004-09-17

Statement 4

IEEE 802.16-04/61

**c/o Intel Corporation  
JF3-336  
2111 NE 25th Avenue  
Hillsboro, OR 97124**



September 14, 2004

Daleep Mohla  
Chair, IEEE-SA Standards Board New Standards Committee (NesCom)

Dear Mr. Mohla,

The WiMAX Forum which is working on Interoperability testing and certifying products based on IEEE 802.16 standards is committed to adopting the IEEE 802.16e standard and is closely tracking its progress. The WiMAX Forum to date has 140 members with 38 additional member applications under submission. Twenty five percent of our memberships are now service providers.

Based upon recent Board and Marketing Working Groups Face to Face sessions the WiMAX Forum charter will be revised to position the WiMAX Forum vision to include fixed and mobile/portable solutions. Our membership believes without approval of the revised PAR, the market opportunity is substantially limited and the proprietary challengers with product available today will have a chance to capture the market. Many of the leading system integrators and manufacturers have product solutions based upon 16e underway in order to play catch up to meet market demand.

As you may be aware, many members of the WiMAX Forum are pro-active contributors to the IEEE 802.16 Working Group and Task Groups. We are aware of the IEEE 802.16 Working Group's proposed P802.16e PAR modifications. We believe that these were made to enable manufacturers to bring better products to the market by adapting to the changing international spectrum regulations and technical/market requirements in order to meet market demand for mobile/portable broadband wireless solutions.

It is encouraging to note that the IEEE P802.16e specification development has been progressing well and the Task Group "e" anticipates conditionally starting Sponsor Ballot next month. The WiMAX Forum believes it is essential that the PAR modifications approved by the IEEE 802 LMSC be also approved by NesCom and the IEEE-SA board before they can do so. The timeliness of the PAR approval is critical to ensure that proper planning and development can occur within the WiMAX forum to enable interoperability testing of products using the technology.

The WiMAX Forum thanks you in advance for your expeditious approval of the IEEE P802.16e PAR modifications and hope you will enable the market place with your timely actions.

Sincerely,

Ronald Resnick  
President and Chair, WiMAX Forum  
ronald.j.resnick@intel.com  
Cell 503 740-8638

cc: Roger Marks, Chair 802.16

**Intel Corporation**  
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September 13, 2004

To:  
Roger Marks, Chair 802.16  
Daleep Mohla, Chair NesCom  
NesCom members  
Don Wright, Chair IEEE-SA Standards Board  
IEEE-SA Standards Board members

Dear Sir or Madam:

We at Intel Corporation wish to express our strong support for IEEE 802.16 and specifically the P802.16e project, specifying mobility enhancements to IEEE Standard 802.16-2004.

Intel employees have been active participants in the 802.16 Working Group and Task Groups, and have been actively working with several companies on IEEE P802.16e. There is a significant international interest in this project and we ask the NesCom and the IEEE-SA Standards Board to facilitate progress on this project.

The P802.16e PAR modifications reflect changes in international spectrum allocation and the regulatory environment, as well as technical and market requirements since the original PAR approval.

Many leading companies are anticipating implementing product to the 802.16e standard, and therefore we believe it is essential that the modified PAR be approved without delay, to enable balloting. Our planned products that are in development based on the expected IEEE 802.16e standard will seriously be affected if we don't have the standard based on these PAR modifications. Furthermore, delay in the approval could result in undesirable, non-compliant and non-interoperable products being introduced to the market diminishing the value of the IEEE standard and hurting consumers as a result.

We have been encouraged by the fast and steady progress on P802.16e and we hope that such progress will continue. The market demand for this standard is very high and the timely completion of this standard is essential for the success of this technology and the rapid market deployment we anticipate.

With hopeful expectation, we thank you for your approval of the modified IEEE P802.16e PAR.

Sincerely,

A handwritten signature in black ink, appearing to read "Pat Gelsinger".

Pat Gelsinger  
Senior Vice President & CTO Intel Corporation