Comments of IEEE 802.16 Working Group on Proposed P802.21.1 PAR

The IEEE 802.16 Working Group has reviewed the draft P802.21.1 PAR and offers the following comments:

(1) **Questions for clarification**

Why is this being proposed as a New Standard? How can you propose to solve the problem across all 802 standards by writing a document that specifically, by virtue of being a NEW standard, does not amend or modify any existing 802 standards? Until we understand the proposed functionality, we cannot understand how this is possible.

What is common about the PHY/MAC protocols under the 802 architecture that provides the ability to do an 802-wide solution for emergency services? Until we understand the proposed functionality, we cannot understand how this is possible.

Section 5.2 (Scope) says 'for emerging requirements for text message and multimedia based emergency services requests.' How does the media type map into 802 access technologies, especially those that are insensitive to higher layer media type definitions?

Where are the emergency service (ES) 'functions' defined? At what layer? For what geographical regions? The proposed standard does not constrain the geographic applicability of the standard, but neither is there any clear indication that the requirements are global.

In Item B under the 5 Criteria Broad Market Potential, the response indicates that interested parties will have to respond to 'changes resulting from this standard'. But the proposed standard is a NEW standard, not changes to existing standards. Please clarify what the *changes* are.

In Item C under the 5 Criteria Broad Market Potential,, if the changes are expected to be primarily to 'software/firmware', why is this being considered as a PHY & MAC new standard? Software/firmware is usually implementation-dependent and outside the scope of 802.

The 5 Criteria Technical Feasibility response alleges that existing 802 solutions to 'do not fully address all emergency services criteria.' However, the PAR proposal admits intention to meet only a very limited set of the overall set of ES features. So why is a new partial solution superior to an existing partial solution?

In the 5 Criteria Technical Feasibility, what existing 802 functionality does the proposed new standard plan to reuse?

The draft PAR indicates that the project plan anticipates going to Sponsor Ballot in June 2010. This seems remarkably optimistic. On what basis does the group make such evaluation, given the expected level of cross-group coordination and experience in time required to develop standards?

In the 5 Criteria Distinct Identity section (1), the response identifies 'location' and 'connection integrity' functional requirements. What is it about the 802 architecture that enables a common method for assessing 'location'? 'Connection integrity?'

In 5 Criteria Distinct Identity section (2), the response identifies 'VoIP based emergency calls across all current 802 transport standards'. Including wireline? Doe the draft PAR propose solving this problem in both 802 wireless and wireline solutions?

(2) **Comments and Suggested Remedies**

Comment: This PAR proposal is bipolar: in one place it says that it will provide an entirely new PHY & MAC specification; in other places is says that it will write other layer solutions or will amend other 802 standards.

Suggested remedy: Please specify coherently and unambiguously in the Scope and Purpose whether this proposed project will be for a new PHY & MAC specification, for amendments to existing other 802 PHY & MAC specifications, for some other entirely new non-PHY&MAC layer development, or for an amendment to the existing 802.21 features and functions. Ensure that the remainder of the draft PAR and 5 Criteria is consistent with the expression of the Scope and Purpose.

Comment: Section 5.2 (Scope): 'As first priority…' is unacceptable language for a Scope statement. The anticipated standard either does or does not specify the mechanisms. The same problem exists with 'The additional objectives.'

Suggested remedy: The Scope should say 'This standard defines mechanisms…' or 'This standard provides...methods…' or similar language. Modify the Scope statement to employ the proper format and language for standards PARs. Furthermore, be explicit as to what sort of mechanisms, at what network layers, are being specified.

Comment: Section 5.4 (Purpose): The language refers to 'initial' and 'longer term' development. The proposed standard cannot bind a future action; can only address what THIS standard achieves. The purpose statement, as written, is inappropriate for inclusion in a standard.

Suggested remedy: Modify the Purpose statement to employ the proper format and language for standards PARs.

Comment: Section 5.5 of the PAR specifies that the proposed standard will develop a NEW PHY and ("This standard will provide the underlying transport layer (PHY and MAC) functionality"). Please describe this protocol in more detail. What is the medium? Is it for wireline applications? Wireless? While this text is in the 'Need for the Project' section, this language is consistent with actual Scope language, while Section 5.2 language is more consistent with identification of need.

Suggested remedy: Modify Section 5.5 ("Need for the Project") section to use appropriate 'needs' language, not Scope language.

Comment: In the 5 Criteria "Technical Feasibility" section, none of the responses seem to address Technical Feasibility.

Suggested remedy: Modify The 5 criteria Technical Feasibility section to properly address Technical Feasibility.

Comment: In the 5 Criteria "Economic Feasibility" section, the response should not depend on connection to the Internet. It should be independent of L3/L4 solution and network design.

Suggested remedy: Modify 5 Criteria Economic Feasibility section to eliminate reference to Internet.