Comments from IEEE 802.16 on “Proposed PAR for IEEE 802.xx Regional Area Network TV Band Specification”

The IEEE 802.16 Working Group appreciates the opportunity to review this PAR from the 802.18 Radio Regulatory TAG.

We appreciate the efforts of 802.18 Study Group to address the upcoming need for an approach to “determine the presence of licensed users in the TV band and adjust [the] frequency of operation, power level, and/or other operational characteristics so as to avoid harmful interference to these operations.” We believe that such approach would allow for the operation of a variety of 802 wireless standards under a common etiquette. We understand that regulators are not seeking to promote the use of a particular air interface technology but instead to provide rules that will allow many MAC/PHY technologies to coexist.

Therefore, the 802.16 Working Group disagrees with the extension of the scope to include the development of a specific air interface technology. We believe that the PAR’s attempt to join these two factors – cognitive radio and a VHF/UHF air interface – into one project is inappropriate. These issues should remain separate.

We believe that the entire proposal is based on a fundamental oversight, as stated in the “Distinct Identity” clause of the Five Criteria: “No current 802 wireless standard specifies operation in the VHF and lower portion of the UHF spectrum, i.e., the TV bands, where, because of the more favorable propagation characteristics, it is possible to cover extensive areas in LOS and non-LOS conditions, making it economically feasible to serve even sparsely populated rural areas.” This is incorrect. The approved IEEE Standard 802.16-2004 does exactly that.

We regret that, since the 802 Executive Committee email reflector was not provided with advance notice of this PAR, members of Working Groups, including 802.16, did not have sufficient advance time to review this proposal.

We note that the PAR procedure (Procedure 2) of the 802 P&P says that “It is highly recommended that a tutorial be given at a previous Plenary session for major new work items.” It is clear that this proposal would represent a major new work item. Therefore, we encourage the Study Group to withdraw its proposal pending a tutorial on the topic. 802.16 members would value the opportunity to become better educated on 802.18’s perceived unique application space requirements that may necessitate the origination of a new air interface standard. A tutorial would help to advance the level of consensus within 802 on this topic.

Given the fact that this PAR has arisen from a Study Group within the Radio Regulatory TAG, we are surprised to find it recommending the development of new air interface. We have done some research to learn the name and charter of this Study Group, but we have not been able to find it on the 802.18 web site. Could you please help us with this query?