#### Comments from 802.16 on Proposed P802.21b PAR

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# Comments from 802.16 on Proposed P802.21b PAR

November 11, 2008

 Proposed PAR: Standard for Local and Metropolitan Area Networks: Media Independent Handover Services (MIH) -Extensions for Supporting Downlink Only Broadcast Technologies

## Comments to section 8.1

- PAR language 8.1(a): "Considering the coverage problems of downlink-only broadcast technologies such as DVB in Europe, the cell-size problems of IEEE technologies and bandwidth problems of cellular broadcast technologies, this amendment will improve the user experience during handovers between IEEE 802.21 supported technologies and other DOB technologies such as DVB, DMB and MediaFLO "
- Comment 1: HO typically requires uplink communication and NDSF queries through pull and push. How will DOB/DVB subscriber be able to query such NDSF server?
- Comment 2: 802.21 is not a DOB technology, the use of the term "other" needs to be removed. Transition of PoA may be possible but not a transition of the terminal identity presence in the network.
- Comment 3: The most likely Objective of the PAR is to maintain the existing data packet flows while transitioning a user to a bi-directional technology. Broadcast is typically an application based procedure that makes particular content and provides it to an agreed port (socket). The method of connecting a source socket and transporting its bearer is not within the realm of an IEEE standard.
- Comment 4: If the objective is to use another RAT to supply DOB technology the missing UL channel, the use of 802.21 may not be needed since the application can invoke a broadcast client to do so without any change to the MAC or MIH layers. Also, using 802.xx as a bi-directional interactive channel to support the required DOB signaling is not related to HO and should not be in scope of 802.21.

## Comments to section 8.1

- PAR language 8.1(b): "Also broadcasters and content providers will be able to extend their services where DOB technologies may have coverage problems."
- Comment 1: How will a DOB provider be able to initiate a HO and extend its coverage? Say the target is loaded, how will the DOB learn about it?
- Proposing to delete 8.1(b) from the PAR.

## **Comments to Distinct Identity section**

- PAR language distinct identity (a): "This amendment will facilitate handovers between DOB technologies and IEEE 802.21 technologies."
- Comment 1: change (a) to: "facilitate handovers between DOB technologies and another RAT that complies with IEEE 802.21 technologies".
- Comment 2: Inter-DOB handover cannot rely on any uplink signaling. One can certainly advertise the presence of a neighboring DOB system to help the MS with the scanning process in preparation for the transition and perhaps also provide a QoS information for a packet flow mapping at the target DOB. However, this type of messaging is typically done above the MAC layer.

## **General Comments**

#### Please explain the user cases. We are stipulating two possible ones below:

- DOB to 802.x and 802.x to DOB HO's may be valid use cases and possibly can be addressed in IEEE, e.g user A is watching ESPN in DOB and enters a 802.x coverage while leaving DOB coverage. Is it for 802.21 to address it? Why?
- A user can simultaneously be connected to both cellular and DOB technologies. The user can subscribe to a multicast stream on DOB and later on be directed to subscribe for the same stream on the cellular technology using multicast or unicast connectivity. This case is not a HO but rather a receiver selection user case possibly assisted by 802.21