

IEEE 802.16 Working Group on Broadband Wireless Access

<http://WirelessMAN.org>



Roger B. Marks
Chair, IEEE 802.16 Working Group
r.b.marks@ieee.org
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To: Kevin Vachon, Chief Operating Officer, Metro Ethernet Forum
Peter Meissner, Operating Officer, NGMN Alliance
Gordon Mansfield, Chair, Small Cell Forum
Declan Byrne, President, WiMAX Forum

cc: Paul Nikolich, Chair, IEEE 802 Executive Committee

Subj: Update on IEEE P802.16r Activity regarding Small Cell Backhaul as of Session #83

The IEEE 802.16 Working Group (WG) on Broadband Wireless Access is writing to provide an update on our progress on amending IEEE Std 802.16-2012 for enhancements to better address Small Cell Backhaul (SCB) Applications and to seek your views.

As noted in our prior statement of 16 November 2012, a Project Authorization Request (PAR) was completed during our Session #82. On 5 December, the IEEE-SA Standards Board approved the request and formally initiated Project P802.16r ([IEEE 802.16-12-0587-05](#)).

Meeting this week in our Session #83, the project has considered several contributions toward the advancement of that work. We have particularly focused on how best to model a deployment architecture based on Carrier Ethernet 2.0. We are interested in supporting a Carrier Ethernet interface to the small cell; in addition, we are interested in exploiting the potential of Carrier Ethernet to support connectivity from our backhaul base station to the access network and core network as well. We have identified some possible architectural models and are seeking comments. Note that the difference between the two figures in the Annex below is limited to the connectivity of the 802.16r system to the Metro Ethernet Network, using a UNI in one case and an ENNI in the other, as indicated in the magenta dashed rectangle drawn in the figures. We are seeking views on the relative advantages of the two options, including regarding the availability of certification of the 802.16r system within the rectangle.

We welcome your further input. We draw your attention to the relevant [Call for Contributions](#). The Working Group would appreciate your inputs prior to the deadline of 13 March. Our next opportunity to respond to a formal communication will occur at [IEEE 802.16 Session #84](#) (18-21 March 2013 in Orlando, FL, USA). For information on our future meeting schedules, see <http://ieee802.org/16/calendar.html>.

Sincerely,

Roger B. Marks
Chair, IEEE 802.16 Working Group on Broadband Wireless Access

Annex 1: Architectural Models under Consideration

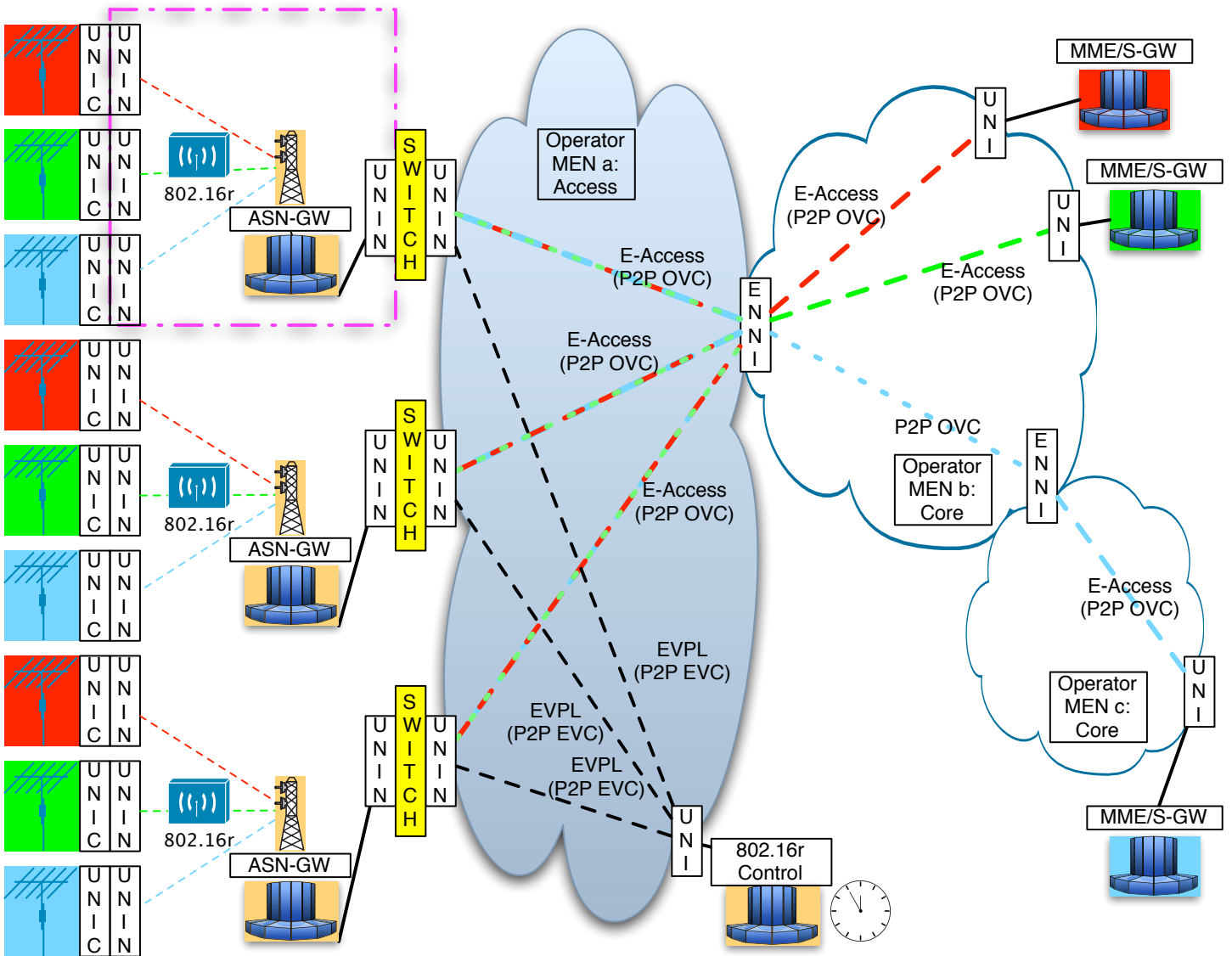


Figure 1: Architectural Model with UNI interface to 802.16r base station.

Squares on the left represent small cells, colored to represent different small cell operators.

The clock represents the source synchronization clock for both 802.16r and small cell base stations.

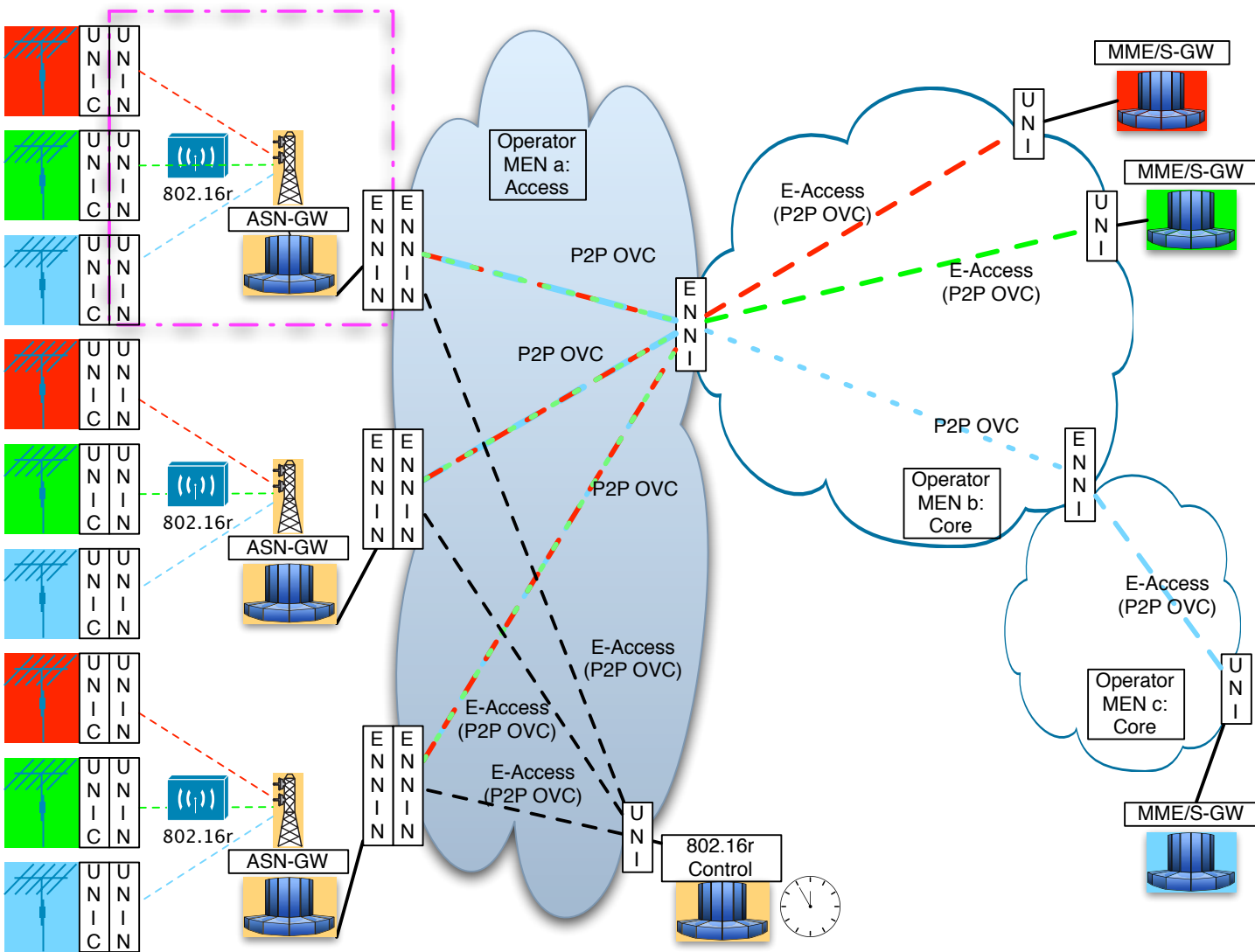


Figure 2: Architectural Model with ENNI interface to 802.16r base station.

Squares on the left represent small cells, colored to represent different small cell operators.

The clock represents the source synchronization clock for both 802.16r and small cell base stations