IEEE P802.11  
Wireless LANs

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| Liaison response to WBA Latitude/Longitude Values | | | | |
| Date: 2014-09-19 | | | | |
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Abstract

Reply to the liaison from Wireless Broadband Alliance regarding latitude and longitude values. Also see 11-14-0706r1.

To: WBA c/o tiago@wballiance.com

Subject: WBA Latitude and Longitude values

Date: 2014-09-17

Dear Tiago,

I would like to thank the Wireless Broadband Alliance (WBA) for their liaison letter that IEEE 802.11 received on 16th May 2014, regarding latitude and longitude values (11-14-0706r1).

Over the air IEEE 802.11 uses little endian and the IETF uses big endian in their standards. Therefore a conversion is necessary. For transmission the original IETF format was split into two parts for transmission over the IEEE 802.11 air interface, specifically an integer 9 bit value together with a 25 bit fraction, making a 34 bit value overall. It should be noted that the sign bit is only included with the integer 9 bit value and not on the 25 bit fraction.

However, recent work within IEEE 802.11 has now updated and improved the Latitude/Longitude report format with that defined by the more recent RFC 6225.

In additition, it should be noted that RFC 5580 specifies how RADIUS only carries the absolute location, ignoring the resolution/uncertainty of the location.

I look forward to continued co-operation with the WBA on this issue.

Sincerely,

Adrian Stephens  
IEEE 802.11 Working Group Chair