

**IEEE 802**  
**Local and Metropolitan Area Network Standards Committee**

**Paul Nikolich**  
**Chairman, IEEE 802 LMSC**



TO: Satoshi Nagata, 3GPP TSG RAN WG1 Chair, nagatas@nttdocomo.com

CC: Dino Flore, 3GPP TSG RAN Chair, oflore@qti.qualcomm.com  
Susanna Kooistra, 3GPP Liaison Coordinator, susanna.kooistra@3gpp.org  
John D'Ambrosia, IEEE 802 Recording Secretary, JAmbrosia@gmail.com  
Steve Shellhammer, IEEE 802.19 Coexistence WG Chair, shellhammer@ieee.org

SUBJECT: Review of 3GPP LAA Specification Rel. 13

DATE: 21 May 2016

Dear Satoshi,

Thank you for supporting the ongoing cooperation over the last year between IEEE 802 and 3GPP RAN in relation to coexistence issues between LAA and 802.11 systems. This cooperation has increased the level of confidence of many stakeholders, including IEEE 802 members, that LAA can indeed be designed in such a way that IEEE 802.11 and LAA systems will coexist fairly in the future in unlicensed spectrum.

The 3GPP LAA Workshop in August 2015 laid the foundations for this increased confidence based at least partially on the 3GPP RAN participants at the Workshop strongly emphasizing the importance of consensus in developing the LAA specifications. This confidence was also supported by Workshop participants explicitly recognizing IEEE 802 (as well as the Wi-Fi Alliance and others) as a significant stakeholder in the LAA specification development and consensus building process. As part of this recognition, the 3GPP RAN Chair committed to:

- Liaising the LAA Rel. 13 CRs to IEEE 802 in December 2015
- Allowing IEEE 802 until early April 2016 to provide comments on the LAA Rel. 13 specification
- Working with IEEE 802 to resolve any comments, starting in April 2016

The early April 2016 deadline was chosen to ensure IEEE 802 had sufficient time to consider the LAA Rel. 13 specification properly, and also to allow time for 3GPP RAN1 to make any necessary changes to the LAA Rel. 13 specification at the April 11-15, 2016 RAN1 #84-bis meeting. While not explicitly discussed at the Workshop, it is the expectation of many IEEE 802 members that the LAA Rel. 13 specification will only be complete once all significant outstanding issues, as outlined in our 18 March 2016 liaison<sup>1</sup>, are resolved. This reasonable expectation is based on the emphasis by the 3GPP RAN Chair and other 3GPP RAN participants at the Workshop of the vital importance of 3GPP addressing the issues raised by all stakeholders.

The liaison<sup>1</sup> contained twelve significant and detailed comments, along with associated suggestions, related to the draft LAA Rel. 13 specification. We understand that the Wi-Fi Alliance also sent a liaison in early April 2016

---

<sup>1</sup> 3GPP R1-163375 (IEEE 802.19-16-0037-09-0000) presented in your RAN1 #84-bis meeting in Busan, Korea 11-15 April 2016

supporting many of IEEE 802's comments and suggestions, as well as making some additional comments and suggestions. We further understand that both liaisons were considered at your 3GPP RAN1 meeting in April 2016. It appears that 3GPP RAN1 were unable to complete the response to at least some of the comments liaised by IEEE 802 and by the Wi-Fi Alliance. We understand that 3GPP RAN1 is now planning to complete the response to all of the liaised comments at your meeting on 23-27 May 2016 in Nanjing, China.

IEEE 802 would appreciate an acknowledgment from 3GPP RAN that the LAA Rel. 13 specification will not be complete until all outstanding issues raised by all stakeholders, including 3GPP RAN1, IEEE 802 and the Wi-Fi Alliance, have been resolved.

Assuming 3GPP RAN1 is able to respond to IEEE 802's comments in your May 2016 meeting, IEEE 802 intends to consider 3GPP RAN1's response at the IEEE 802 plenary meeting of 24-29 July 2016 in San Diego, California and subsequently respond to 3GPP RAN1 as soon as practical.

IEEE 802 looks forward to a continued, productive interchange between our organizations on this and other issues.

Regards,

/s/ Paul Nikolich

Paul Nikolich  
Chairman, IEEE 802 LAN/MAN Standards Committee  
IEEE Fellow  
p.nikolich@ieee.org