IEEE P802.11
Wireless LANs

|  |
| --- |
| TGaz Meeting MinutesJuly 15th, 2020Telecon (Plenary) |
| Date: 2020-07-15 |
| Author(s): |
| Name | Affiliation | Address | Phone | Email |
| Roy Want  | Google Inc | 1541 Morton Ave, Los Altos,CA 94024 | +1-650-691-3600 | roywant@google.com |

Abstract

Minutes for the TGaz plenary meeting, beginning on Wednesday 15th July, 2020.

**IEEE 802.11 Task Group AZ**

**July 15th, 2020**

1. **TGaz Ad Hoc – Wed, July 15th 2020 – Slot #1**
	1. Called to order by Vice Chair (Assaf Kasher) at **10.00 am PST**; Technical Co-Editors: Chao Chun (MediaTek), Roy Want (Google Inc.); Acting Secretary: Roy Want (Google Inc).
	2. Agenda Doc. **IEEE 802.11-19/1002r2 (in progress)**
	3. Review Patent Policy and logistics
		1. Chair reviewed the IEEE-SA Patent Policy, and logistics – no clarifications requested.
		2. Chair called for any potentially essential patents, no one stepped up.
		3. Chair reviewed IEEE 802 WG participation as an individual professional, and anti-trust requirements, IEEE SA copyrights policy – no clarification requested.
		4. Recorded Participation requirement
			1. Headcount: 156 recorded by IMAT (see **Attendance** section)
	4. Review Agenda
		1. Agenda review and setting: reviewed submissions for the ad hoc meeting.
		2. Chair called for any additional feedback and changes to agenda.
			1. Agenda agreed – no objections.
	5. Nehru Bhandaru (Broadcom) presented document **11-20/963r0**
		1. **Title**: Proposed Resolution for some LB249 CRs
		2. **Summary:** This document contains proposed resolution for the CID 3880 against TGaz Draft 2.0 from LB249. Proposed changes are relative to TGmd Draft 3.3, TGba Draft 6.1 and TGaz Draft 2.2.
		3. C. Clarification on the SecureLTFImplemented variable needing to be true, and STA advertising Secure LTF support, but keys are needed in other cases.
		4. R. If you use MAC level security only, we don’t need KDK in this case.
		5. C. Scheme can be extended in other ways by other groups.
		6. R. The scheme was adapted by 11ba, but as they publish first, we have adapted to their own modifications. But it provides the functionality we want.
		7. C. Subclause – on using FILS authentication, is it only this?
		8. R. MAC security is using PMK. KDK is derived at either end depending on what is supported by the STA.
		9. C. Are we using the change from 11ba, or is 11ba using ours [11az]?
		10. R. The change is a change in terminology. We are using the same basic derivation as 11ba. We need to make sure that 11az and 11ba cross references each other appropriately.
		11. C. Does it use different bits or not?
		12. R. The seed material is used to derive the same key. We just need to agree on the derivation.
		13. C. How do we proceed with this proposal?
		14. R. We don’t need a strawpoll today, but can follow up in a couple of weeks.

* 1. Solomon Trainin (Qualcomm) presented document **11-20/0698r1 (uploaded as r2)**
		1. **Title**: Resolution of CID 3940
		2. **Summary:** Resolution of CID 3940
		3. C. Clarify you want to move the Secure LTF Support and the Protected Management Frames (PMF) from the extended capabilities of the beacons to
		4. the RSN capabilities field.
		5. C. Perhaps these changes need to be underlined as they are new, and the removed paragraphs need to be crossed out.
		6. R. Fixed underlines and deletions (**r2**).
		7. C. Are we using the protected management frame bit for negotiation, or the timing protection.
		8. R. We are now using the protected management frame (we just changed the action frame).
		9. C. We call these all FTM Measurement frames, we need a new name for this category.
		10. R. It is the name of the field – you may be changing the name of the frame but not name of field.
		11. C. We need to rationalize these names.
		12. C. We can start to use alternate bits that follow 11ax and 11ay.
		13. R. It’s not clear what bits are used in 11ax, 11ay without research. This is not in own purview. ANA needs to make these assignments.
		14. **Strawpoll**:

We agree to the CID resolutions **3940** as depicted in document **11-20-698r2**.

* + 1. **Results** (Y/N/A): 21/1/25
		2. C. We’ll likely motion it later this month.
	1. Reviewed submission pipeline:
		1. Nehru Bhandaru (Broadcom) on **11-20/963**
		2. Erik Lindskog (Samsung) **11-20/1020**
	2. Telecon Planning
		1. New telecons: **7/22, 7/29**
		2. Plenary telecons: **7/30, 8/27, 9/24**
	3. Status of CID resolution for LB249
		1. From 460 Technical Comments, 204 have been resolved
		2. From 540 Editorial CIDs, 434 have been resolved.
		3. We still have 121 unassigned Technical CIDs
		 – need to pick up the pace on the TCs
	4. **Any other Business (AOB)**: None
	5. **Adjourned 11.21am**.

**References**

* <https://mentor.ieee.org/802.11/dcn/20/11-20-1002-02-00az-tgaz-july-to-sep-meetings-agenda.pptx>
* <https://mentor.ieee.org/802.11/dcn/20/11-20-0963-00-00az-cid-3880-kdk-hltk.docx>
* <https://mentor.ieee.org/802.11/dcn/20/11-20-0698-02-00az-lb249-cid3940-resolution.docx>

**Attendance**

|  |  |  |  |
| --- | --- | --- | --- |
| Group | Date | Name | Affiliation |
| TGaz | 7/15 | Abdelaal, Rana | Broadcom Corporation |
| TGaz | 7/15 | Adhikari, Shubhodeep | Broadcom Corporation |
| TGaz | 7/15 | Agrawal, abhishek | ON Semiconductor |
| TGaz | 7/15 | Alayasra, Musab | Medipol University; Vestel |
| TGaz | 7/15 | Allegue Martinez, Michel | Aerial Technologies Inc. |
| TGaz | 7/15 | Anwyl, Gary | MediaTek Inc. |
| TGaz | 7/15 | Au, Oscar | Origin Wireless |
| TGaz | 7/15 | B, Hari Ram | NXP Semiconductors |
| TGaz | 7/15 | Bajko, Gabor | MediaTek Inc. |
| TGaz | 7/15 | Batra, Anuj | Apple Inc. |
| TGaz | 7/15 | Bei, Jianwei | NXP Semiconductors |
| TGaz | 7/15 | Berger, Christian | NXP Semiconductors |
| TGaz | 7/15 | Bhandaru, Nehru | Broadcom Corporation |
| TGaz | 7/15 | Bims, Harry | Bims Laboratories, Inc. |
| TGaz | 7/15 | Bluschke, Andreas | Signify |
| TGaz | 7/15 | Bober, Lennert | Fraunhofer Heinrich Hertz Institute |
| TGaz | 7/15 | Cao, Rui | NXP Semiconductors |
| TGaz | 7/15 | Cariou, Laurent | Intel Corporation |
| TGaz | 7/15 | Cavalcanti, Dave | Intel Corporation |
| TGaz | 7/15 | Cepni, Gurkan | Apple Inc. |
| TGaz | 7/15 | Chen, Evelyn | Ericsson AB |
| TGaz | 7/15 | Chen, Na | MaxLinear Corp |
| TGaz | 7/15 | Chen, Xiaogang | Intel Corporation |
| TGaz | 7/15 | Choo, Seungho | Senscomm Semiconductor Co., Ltd. |
| TGaz | 7/15 | Chu, Liwen | NXP Semiconductors |
| TGaz | 7/15 | Chung, Bruce | Realtek Semiconductor Corp. |
| TGaz | 7/15 | Coffey, John | Realtek Semiconductor Corp. |
| TGaz | 7/15 | Das, Dibakar | Intel Corporation |
| TGaz | 7/15 | Das, Subir | Perspeacta Labs Inc |
| TGaz | 7/15 | da Silva, Claudio | Intel Corporation |
| TGaz | 7/15 | Derham, Thomas | Broadcom Corporation |
| TGaz | 7/15 | Ding, Baokun | Huawei Technologies Co. Ltd |
| TGaz | 7/15 | Duan, Ruchen | SAMSUNG |
| TGaz | 7/15 | Eitan, Alecsander | Qualcomm Incorporated |
| TGaz | 7/15 | feng, Shuling | MediaTek Inc. |
| TGaz | 7/15 | Fischer, Matthew | Broadcom Limited |
| TGaz | 7/15 | Gardner, James | Qualcomm Incorporated |
| TGaz | 7/15 | Grandhe, Niranjan | NXP Semiconductors |
| TGaz | 7/15 | Grigat, Michael | Deutsche Telekom AG |
| TGaz | 7/15 | Guntupalli, Lakshmikanth | lkg497@gmail.com |
| TGaz | 7/15 | Hansen, Christopher | Peraso Technologies Incorporated |
| TGaz | 7/15 | Harrison, Edward | Anritsu Company |
| TGaz | 7/15 | Huang, Po-Kai | Intel Corporation |
| TGaz | 7/15 | Huang, Xiaolong | Qualcomm Incorporated |
| TGaz | 7/15 | Ibrahim, Mostafa | SAMSUNG ELECTRONICS |
| TGaz | 7/15 | Ikegami, Tetsushi | Meiji University |
| TGaz | 7/15 | Ji, Chenhe | Huawei Technologies Co., Ltd |
| TGaz | 7/15 | Jones, Vincent Knowles IV | Qualcomm Incorporated |
| TGaz | 7/15 | Jungnickel, Volker | Fraunhofer Heinrich Hertz Institute |
| TGaz | 7/15 | Kain, Carl | US Department of Transportation |
| TGaz | 7/15 | Kasher, Assaf | Qualcomm Incorporated |
| TGaz | 7/15 | Kerry, Stuart | OK-Brit; Ruckus; CommScope |
| TGaz | 7/15 | Khericha, samir | Broadcom Corporation |
| TGaz | 7/15 | Khude, Nilesh | NXP Semiconductors |
| TGaz | 7/15 | Kim, Youn-Kwan | The Catholic University of Korea |
| TGaz | 7/15 | Kishida, Akira | Nippon Telegraph and Telephone Corporation (NTT) |
| TGaz | 7/15 | Klimakov, Andrey | Huawei Technologies Co., Ltd |
| TGaz | 7/15 | Kneckt, Jarkko | Apple Inc. |
| TGaz | 7/15 | Koc, Onur | Onur Koc Vestel |
| TGaz | 7/15 | Kondo, Yoshihisa | Advanced Telecommunications Research Institute International (ATR) |
| TGaz | 7/15 | Kwon, Young Hoon | NXP Semiconductors |
| TGaz | 7/15 | Lan, Zhou | MediaTek Inc. |
| TGaz | 7/15 | Lee, Hyeong Ho | Netvision Telecom Inc. |
| TGaz | 7/15 | Lee, Il-Gu | Sungshin University |
| TGaz | 7/15 | Lee, Jae Seung | Electronics and Telecommunications Research Institute (ETRI) |
| TGaz | 7/15 | Lee, Wookbong | SAMSUNG |
| TGaz | 7/15 | Li, Guoqing | Apple Inc. |
| TGaz | 7/15 | Li, Qinghua | Intel Corporation |
| TGaz | 7/15 | Li, Yanchun | Huawei Technologies Co.,  Ltd |
| TGaz | 7/15 | Lindskog, Erik | SAMSUNG |
| TGaz | 7/15 | LIU, CHENCHEN | Huawei Technologies Co. Ltd |
| TGaz | 7/15 | Liu, Der-Zheng | Realtek Semiconductor Corp. |
| TGaz | 7/15 | Ma, Li | MediaTek Inc. |
| TGaz | 7/15 | Madpuwar, Girish | Broadcom Corporation |
| TGaz | 7/15 | Max, Sebastian | Ericsson AB |
| TGaz | 7/15 | Mcconnell, Ray | Blu Wireless Technology Ltd |
| TGaz | 7/15 | Mirfakhraei, Khashayar | Cisco Systems, Inc. |
| TGaz | 7/15 | Monajemi, Pooya | Cisco Systems, Inc. |
| TGaz | 7/15 | Murphy, Rick | vLogic, Inc. |
| TGaz | 7/15 | Nagai, Yukimasa | Mitsubishi Electric Corporation |
| TGaz | 7/15 | Nam, Junyoung | Qualcomm Incorporated |
| TGaz | 7/15 | Namboodiri, Vamadevan | SAMSUNG ELECTRONICS |
| TGaz | 7/15 | NANDAGOPALAN, SAI SHANKAR | Cypress Semiconductor Corporation |
| TGaz | 7/15 | Nezou, Patrice | Canon Research Centre France |
| TGaz | 7/15 | noh, yujin | Newracom Inc. |
| TGaz | 7/15 | Orlik, Philip | Mitsubishi Electric Research Labs (MERL) |
| TGaz | 7/15 | Oyama, Satoshi | Association of Radio Industries and Businesses (ARIB) |
| TGaz | 7/15 | Pare, Thomas | MediaTek Inc. |
| TGaz | 7/15 | Parekh, Jatin | Arista Networks, Inc. |
| TGaz | 7/15 | PESIN, ANTHONY | InterDigital, Inc. |
| TGaz | 7/15 | Petry, Brian | Broadcom Corporation |
| TGaz | 7/15 | Pirhonen, Riku | Self |
| TGaz | 7/15 | porat, ron | Broadcom Corporation |
| TGaz | 7/15 | Prabhakaran, Dinakar | Broadcom Corporation |
| TGaz | 7/15 | Puducheri, Srinath | Broadcom Corporation |
| TGaz | 7/15 | Rafique, Saira | Vestal Company, Istanbul Medipol University;  |
| TGaz | 7/15 | Rai, Kapil | Qualcomm Incorporated |
| TGaz | 7/15 | Raissinia, Alireza | Qualcomm Incorporated |
| TGaz | 7/15 | Rezk, Meriam | Qualcomm Incorporated |
| TGaz | 7/15 | RISON, Mark | Samsung Cambridge Solution Centre |
| TGaz | 7/15 | Robert, Joerg | University of Erlangen-Nuremberg |
| TGaz | 7/15 | Rosdahl, Jon | Qualcomm Technologies, Inc. |
| TGaz | 7/15 | Roy, Sayak | NXP Semiconductors |
| TGaz | 7/15 | Sand, Stephan | German Aerospace Center (DLR) |
| TGaz | 7/15 | Sandhu, Shivraj | Qualcomm Incorporated |
| TGaz | 7/15 | Sarris, Ioannis | u-blox |
| TGaz | 7/15 | Schiessl, Sebastian | u-blox |
| TGaz | 7/15 | Serafimovski, Nikola | pureLiFi |
| TGaz | 7/15 | Sevin, Julien | Canon Research Centre France |
| TGaz | 7/15 | Shah, Kunal | Itron Inc. |
| TGaz | 7/15 | Sherlock, Ian | Texas Instruments Incorporated |
| TGaz | 7/15 | Sinn, Ulrich | Siemens AG |
| TGaz | 7/15 | Siyari, Peyman | Qualcomm Incorporated |
| TGaz | 7/15 | Son, Ju-Hyung | WILUS Inc. |
| TGaz | 7/15 | Sosack, Robert | Molex Incorporated |
| TGaz | 7/15 | Srinivasa, Sudhir | NXP Semiconductors |
| TGaz | 7/15 | Stahl Diskin, Nir | Broadcom Corporation |
| TGaz | 7/15 | Stanley, Dorothy | Hewlett Packard Enterprise |
| TGaz | 7/15 | Stott, Noel | Keysight Technologies |
| TGaz | 7/15 | Su, Hang | Broadcom Corporation |
| TGaz | 7/15 | SUH, JUNG HOON | Huawei Technologies Co. Ltd |
| TGaz | 7/15 | Sumi, Takenori | Mitsubishi Electric Corporation |
| TGaz | 7/15 | Sun, Sheng | Huawei Technologies Co.,  Ltd |
| TGaz | 7/15 | Sun, Yanjun | Qualcomm Incorporated |
| TGaz | 7/15 | Sun, Yingxiang | Huawei Technologies Co. Ltd |
| TGaz | 7/15 | Tian, Bin | Qualcomm Incorporated |
| TGaz | 7/15 | Tian, Tao | Unisoc Comm. |
| TGaz | 7/15 | Trainin, Solomon | Qualcomm Incorporated |
| TGaz | 7/15 | Turkmen, Halise | Vestal Company, Istanbul Medipol University;  |
| TGaz | 7/15 | Uln, Kiran | Cypress Semiconductor Corporation |
| TGaz | 7/15 | Venkatesan, Ganesh | Intel Corporation |
| TGaz | 7/15 | Verma, Sindhu | Broadcom Corporation |
| TGaz | 7/15 | Wang, Chao Chun | MediaTek Inc. |
| TGaz | 7/15 | Wang, Pu | Mitsubishi Electric Research Labs (MERL) |
| TGaz | 7/15 | Wang, Qi | Apple Inc. |
| TGaz | 7/15 | Wang, Yi-Hsiu | Zeku |
| TGaz | 7/15 | Want, Roy | Google |
| TGaz | 7/15 | Wendt, Matthias | Signify |
| TGaz | 7/15 | Wentink, Menzo | Qualcomm |
| TGaz | 7/15 | Winser, Paul | Blu Wireless |
| TGaz | 7/15 | Wu, Kanke | Qualcomm Incorporated |
| TGaz | 7/15 | Wullert, John | Perspecta Labs |
| TGaz | 7/15 | Xue, Qi | Qualcomm Incorporated |
| TGaz | 7/15 | Yan, Zhongjiang | Northwestern Polytechnical University |
| TGaz | 7/15 | Yang, Mao | Northwestern Polytechnical University |
| TGaz | 7/15 | Yang, Yunsong | Futurewei Technologies |
| TGaz | 7/15 | Yee, Peter | NSA-CSD |
| TGaz | 7/15 | yi, yongjiang | Futurewei Technologies |
| TGaz | 7/15 | Yona, Yair | Qualcomm Incorporated |
| TGaz | 7/15 | Young, Christopher | Broadcom Corporation |
| TGaz | 7/15 | Zeng, Ruochen | NXP Semiconductors |
| TGaz | 7/15 | Zhang, Hongyuan | Marvell Semiconductor, Inc. |
| TGaz | 7/15 | Zhang, Meihong | Huawei Technologies Co., Ltd |
| TGaz | 7/15 | Zhang, Yan | NXP Semiconductors |
| TGaz | 7/15 | Zheng, Xiayu | NXP Semiconductors |
| TGaz | 7/15 | Zou, Tristan | Qualcomm Incorporated |