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<th>Project</th>
<th>IEEE 802.16 Broadband Wireless Access Working Group</th>
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<tr>
<td>Title</td>
<td>Security ad-hoc – Minutes of the 1st conference call</td>
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<td>Date Submitted</td>
<td>2007-05-04</td>
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<td>Sheng (Robert) Sun</td>
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<td>Re:</td>
<td>Minutes of the first conference call of the Relay TG’s Other MAC/PHY ad hoc, held on 4 April 2007.</td>
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<td>Purpose</td>
<td>Information</td>
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Security Ad-hoc: Minutes of the 1st conference call

Sheng Sun

Chair: Sheng Sun

Date: Apr 4th, 2007, GMT 13:00

Attendees:

- Haihong Zheng, Nokia, haihong.1.zheng@nokia.com
- Yousuf Saifullah, Nokia, Yousuf.Saifullah@nokia.com
- Cancan Huang, ZTE, chuang@zteusa.com
- RT, ITRI, rtwang@csie.nctu.edu.tw
- Sergey Seleznev, Samsung, s.sergey@samsung.com
- Dan Brown, Motorola, ADB002@motorola.com
- Roger Paterson, Motorola, r.peterson@motorola.com
- Yanling Lu, Huawei, luyanling@huawei.com
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- Hua-Chiang Yin, III, hcyin@nmi.iii.org.tw
- Yung-Ting Lee, III, lyd@nmi.iii.org.tw
- Masato Okuda, Fijitsu, okuda@jp.fujitsu.com
- Peiying Zhu, Nortel, pyzhu@nortel.com
- Sheng Sun, Nortel, shengs@nortel.com

(Note: If I had missed out anyone's name or mis-spelled, please feel free to contact me for correction)

Contributions being reviewed

1: #C80216j-08_201 Centralized authentication for multi-hop relay system
Presenter: Haihong Zheng (Nokia)
Comments: - RS being transparent to authentication process could lead to expose the MR-BS to the attack (ZTE)
- The HMAC/CMAC tuple isn't enough to protect the PKM authentication information messages (Hisilicon and Motorola)

Resolutions: Open for improvements via discussion and harmonization for next conference

2: #C80216j-08_098 Distributed authentication for .16j relay system
Presenter: Sheng Sun (Nortel)
Comments: - The comprise of single RS which is vulnerable to attacks, could break the whole security system within the Relay network (Nokia)
- The transfer AK down to RS is not safe as RS (Nokia)

Resolutions: Open for improvements via discussion and harmonization for next conference

3: #C80216j-08_188 Shared Management Message in MR system: Format, Transfer and Security for next conference
Presenter: Yanling Lu (Hisilicon)
Comments: - The concern with the two-tier overhead with the addition of the HMAC/CMAC tuple (Nokia)
- The concern w.r.t uplink message transporting based on the shared management scheme (Motorola)

Resolutions: Open for improvements via discussion and harmonization for next conference

4: #C80216j-08_149 TEK Transfer in Relay Systems
Presenter: Masato Okuda
Comments: - The insecure transfer of the TEK to RS given the RS has no track of the security association of the MS authentication (Nortel)
- The comprise of single RS which is vulnerable to attacks, could break the whole security system within the Relay network (Nokia and ITRI)

Resolutions: Open for improvements via discussion and harmonization for next conference

5: #C80216j-08_134 Security Zone Key generation and management for multi-hop relay system
Presenter: Sheng Sun
Comments: - Question regards whether the Group key applies to both Unicast and multicast management messages

Resolutions: Open for improvements via discussion and harmonization for next conference

Action items for all ad-hoc group participants:
- Send comments and questions for clarification to each contribution authors or utilize the security ad-hoc group email reflector

1: #C80216j-08_201 Centralized authentication for multi-hop relay system
Author: Haihong Zheng (haihong.1.zheng@nokia.com)

2: #C80216j-08_098 Distributed authentication for .16j relay system
Author: Sheng Sun (shengs@nortel.com)

3: #C80216j-08_188 Shared Management Message in MR system: Format, Transfer and Security for next conference
Author: Yanling Lu (luyanying@huawei.com)

4: #C80216j-08_149 TEK Transfer in Relay Systems
Author: Masato Okuda (okuda@jp.fujitsu.com)

5: #C80216j-08_134 Security Zone Key generation and management for multi-hop relay system
Author: Sheng Sun (shengs@nortel.com)

General Comments: Many security options may lead to bigger security problems (Can)