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| Project | **IEEE 802.21.1 Media Independent Services** **<**[**http://www.ieee802.org/21/**](http://www.ieee802.org/21/)**>** |
| Title | **Suggested remedy for Cmt #162 and #163 of LB9** |
| DCN | **21-16-0015-01-SAUC** |
| Date Submitted | **January 30, 2016** |
| Source(s) | Yoshikazu Hanatani (Toshiba) |
| Re: | Session #72, Atlanta |
| Abstract | MBBHandoverSupport and MobilityManagementSupport are handover specific parameter. So, MBBHandoverSupport parameter in MIS\_Capability\_Discovery primitives and messages, and MobilityManagementSupport parameter in MIS\_Link\_Up primitive and message should be moved from 802.21m to 802.21.1. |
| Purpose | Suggested remedy for Cmt #162 and 163 in LB9. |
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Suggested remedy:

Change as follows.

*Add following rows to Table 9*

Table 9—MIS\_SAP primitives

|  |  |  |  |
| --- | --- | --- | --- |
| **Primitives** | **Servicecategory** | **Description** | **Definedin** |
| Link\_Up | Event | L2 connection has been established | 7.3.2 in IEEE 802.21m |

*Add following rows to Table 10*

1.

Table 10—MIS\_SAP primitives

|  |  |  |  |
| --- | --- | --- | --- |
| **Primitives** | **Servicecategory** | **Description** | **Definedin** |
| MIS\_Capability\_Discover | Service management | Discover list of Events and Command supported by MISF | 7.4.1 in IEEE 802.21m |
| MIS\_Link\_Up | Event | L2 connection has been established | 7.4.9 in IEEE 802.21m |

*Add following rows to Table G.2*

**Table G.2—Type values for TLV encoding**

|  |  |  |
| --- | --- | --- |
| **TLV type name** | **TLVtype value**a | **Data type** |
| MBB handover support  | 10 | LIST(MBB\_HO\_SUPP)  |
| Mobility management support | 18 | IP\_MOB\_MGMT |

*Add following rows to Table E.6*

Table E.6—Data type for MIS capabilities

|  |  |  |
| --- | --- | --- |
| **Data type name** | **Derived from** | **Definition** |
| MBB\_HO\_SUPP | SEQUENCE(NETWORK\_TYPE, NETWORK\_TYPE, BOOLEAN) | Indicates if make before break is supported FROM the first network type TO the second net­work type.The BOOLEAN value assignment:True: Make before break is supported. False: Make before break is not supported. |

*Add following new subclause E.XXX and new table E.ZZZ to Annex E*

**E.XXX Data types for IP configuration**

**Table E.12—Data types for IP configuration**

|  |  |  |
| --- | --- | --- |
| **Data type name** | **Derived from** | **Definition** |
| IP\_MOB\_MGMT | BITMAP(16) | Indicates the supported mobility management protocols.Bit 0: Mobile IPv4 (IETF RFC 5944)Bit 1: Mobile IPv4 Regional Registration (IETF RFC 4857)Bit 2: Mobile IPv6 (IETF RFC 6275)Bit 3: Hierarchical Mobile IPv6 (IETF RFC 4140)Bit 4: Low Latency Handoffs (IETF RFC 4881)Bit 5: Mobile IPv6 Fast Handovers (IETF RFC 5268)Bit 6: IKEv2 Mobility and Multihoming Protocol (IETF RFC 4555)Bit 7–15: (Reserved) |

*Add following sublcause as 5.10.AAA*

**5.10.AAA Link\_Up.indication**

This primitive is defined in 7.3.2 of Draft IEEE 802.21m/D02. Following additional parameter is needed while using this primitive for handover use.

Use case specific parameters

|  |  |  |
| --- | --- | --- |
| **Name** | **Data type** | **Description** |
| MobilityManagementSupport | IP\_MOB\_MGMT | (Optional) Indicates the type of Mobility Manage­ment Protocol supported by the new PoA. |

*Add following sublcause as 5.11.BBB and 5.11.CCC*

5.11 MIS\_SAP primitives

**5.11.BBB MIS\_Capability\_Discover**

This primitive is defined in 7.4.1 of Draft IEEE 802.21m/D02. Following additional parameter is needed while using this primitive for handover use.

Use case specific parameters

|  |  |  |
| --- | --- | --- |
| **Name** | **Data type** | **Description** |
| MBBHandoverSupport | LIST(MBB\_HO\_SUPP) | (Optional) This is used to indicate if a make before break handover is supported on the remote MISF. Break before make handover is always supported. |

MBBHandoverSupport parameter needs to be added to MIS\_Capability\_Discover.request, MIS\_Capability\_Discover.indication, MIS\_Capability\_Discover.response, and MIS\_Capability\_Discover.confirm specified in 7.4.1 of Draft IEEE 802.21m/D02.

**5.11.CCC MIS\_Link\_Up.indication**

This primitive is defined in 7.4.7 of Draft IEEE 802.21m/D02. Following additional parameter is needed while using this primitive for handover use.

Use case specific parameters

|  |  |  |
| --- | --- | --- |
| **Name** | **Data type** | **Description** |
| MobilityManagementSupport | IP\_MOB\_MGMT | (Optional) Indicates the type of Mobility Manage­ment Protocol supported by the new PoA. |

*Add following new subclauses 5.13.DDD to 5.13*

**5.13.DDD Messages for service management**

**5.13.DDD.1 MIS\_Capability\_Discover**

MBB Handover Support TLV needs to be added to MIS\_Capability\_Discover request, and MIS\_Capability\_Discover response specified in 8.6.1 of Draft IEEE 802.21m/D02.

Use case specific TLVs

|  |
| --- |
| MBBHandoverSupport (optional)(MBB handover support TLV) |

*Add following new subclauses 5.13.EEE to 5.13.1*

**5.13.1 MIS messages for event services**

**5.13.1.EEE MIS\_Link\_Up**

MobilityManagementSupport TLV needs to be added to MIS\_Link\_Up indication specified in 8.6.2.2 of Draft IEEE 802.21m/D02.

Use case specific TLV

|  |
| --- |
| MobilityManagementSupport (optional)(Mobility management support TLV) |